

(A) LENGTH: 539 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 656:

10 GTATCCATGG GCCCGTTnCG CACAACATTT GGnACAATTA GGTACACGnG TTGTCaTCGG 60  
 TCGTTTCGGT ATAATTTTAT CGAATGaAGG CGGTGCGTTA CAAACAATGA AACTACCATA 120  
 CGAATATTAC ATTGGTGGTA AATTAGGTTT TGGTCAACAA TGGTATTCAT GGATTCATAT 180  
 15 CAATGATTTA ATTCAAGCTA TTTTATTTTT AATAAATAAC GAGTCAGCTA GTGGTCCGTT 240  
 TAATTTAACT GCACCTATAC CTGAACGTCA AAATTTATTT GGCTACACTT TAGCAAGAGC 300  
 TATGCATAAG CCTCATGAAA CTTGGGCACC AAGTCTTGCA ATGCGTCTCA TACTTGGTCA 360  
 20 AATGTCAACA GTAGTATTGG ATACTCAAAA AGTATTACCT aATAAAATTC AAGCATTGGG 420  
 aTTCCAATTT AAATATAGTA ATTTAAAAAT GGnACTTGAA GATTTAATTA AAGAATAATC 480  
 AATACCATTA ATGAGCATTG GAAACAACAT ATGTACTAAA TGTAATGTCT AGAGCGACT 539

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(2) INFORMATION FOR SEQ ID NO: 657:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1106 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 657:

ATCAAGTTGA ATATCATCCA TATTTAACCC AACATAAATT GArATTATAT TTGGCAGCAC 60  
 AACGTATCGT gATGGaATCT TGGTCACCAT TGATGAATGC ACAAATTTTA AATGATGAGA 120  
 40 CAATTAAGA CATTGCTCAA GAATTAGGAA AGTCACCTGC CCAAGTTGTT TTAAGATGGA 180  
 ATGTGCAGCA TGCTGTGGTT ACAATCCCTA AATCGGTGAC ACCAAACAGA ATCTCTGAAA 240  
 ATTTCCAAAT ATTTGATTTT GAATTATCAG ATGAACAAAT GACGCGAATT GATGGTTTAA 300  
 45 ATCAAGATAA GAGAATTGGA CCTGATCCAA AAAAATTTGA AGGCTAGATT AAAATCGCTC 360  
 AACTGATGAA AAGGTTAGAT GAATTGTCAG GGCTTGGGAC ATTAAGTTCT TAGGCAATGT 420  
 50 AAAAAAGCTG ATTTCTATTA ATTATTTGAT AGAAATCAGC TTTTTTGATA TGTATTTTAT 480  
 AATGTACAGC TCGTTGAGCT GCTATTTTCC TTATATTAAG TGCCATTAAT ACAAACCTA 540  
 GCTCTCGTTT AACTTTATTT AtTCCTCGAA CTGACGTTTC AGTTAAACCC AAAATAGCCT 600

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CTGGTTCAGA AAGCTTTTGA TTAATTGGA CTTTAAAGTA TTCCAATTA TAATTCTTCA 720  
 TGATTCTCTT ATTGGATTTT GAATTGGTT TCATGCATTG TTGCCTCAAA GAACATGCTG 780  
 5 AACAGTCATC GCATTCATAT AGTTTGAAGT CTCGTTTAAA ACCATATCTA TCATTACGGT 840  
 ATGCATATCT TTTAAACCT ATTCTTTTGT TATTAGGACA TATAAATTCA TCATTAAGTT 900  
 10 CGTCATATTT CCAATTTTGA GTGTCGAAAA TGTCACTTT AACTTTTCTA GTTTTATCT 960  
 TAATAACAT GCCATACGTA ATAAGTGGCG TTTTATTAAA ATCATCTATA ATGGCCATAT 1020  
 AGTTTTGGCT CACTACCCAT AACCTGGCAT CAGCTACCAA ATGAACCGAA GGGATTTTTG 1080  
 15 GAATCCATTG GTTGAAAAAA TGGGAA 1106

(2) INFORMATION FOR SEQ ID NO: 658:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 658:

TTTTAACTTT ACTCTTTGAT TTAAAGAGTG ATAAATGTTT ACAGTTTAAT TAAAACTGCA 60  
 TAAGAACTTC TAGCTTTTCT CTTTCGTTCA AAGAGAAGCA GCTGTTGCA GTTTAATCAA 120  
 30 AACCACATAA AGCTTTTAAC TTTACTCTTT GATTTAAAGA GTGATAAATG TTTACAGTTT 180  
 AATTAAACT GCATAAGAAC TTCTAGCTTT TCTCTTCGT TCAAAGAGAA GCAGCTGTTT 240  
 35 GCAGTTTAAT CAAAACCACA TAAAGCTTTT AACTTTACTC TTTGATTTAA AGAGTGACAA 300  
 ATGTTTACAG TTTAATTAAA ACTGCATAAG AACTTCTAGC TTTTCTCTTT CGTTCAAAGA 360  
 GAAGTTCTAA TACCACCATA TCGTGCATC GGAACGGTA 400

(2) INFORMATION FOR SEQ ID NO: 659:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1899 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 659:

ATAATTACAA TGGCTACTGC AATTATTGTT GGAATTATAT ATTTAGTTT AGTCATCATT 60  
 TATGCTCCCT TGATTTCAAA TTCATATCAT TAGTTTACCA TATTGAAGAT GATATAATAA 120

|    |                                                                     |      |
|----|---------------------------------------------------------------------|------|
|    | AAC TT TAACT GAGCTTCATG GGGCACCAGG TTTTGAAGAA GAAGTAAAAA ATTATATGAC | 240  |
|    | TCAGCAAATG GCGCCGTACG TAGATGAATT TATTGAAAAT CGTATGGGTG GATTTTGTGG   | 300  |
| 5  | TGTGAAAAAA TCTAAAAATC CAAATGCAAA ACGTSTAATG ATTGCAGCAC ATATGGaTGA   | 360  |
|    | AATCGGATTT ATGATTACAA ATATCACTAA AAATGGAATG ATTCAATTCA CAAATTTAGG   | 420  |
|    | TGGTGTTGCA AATGATATTT GGCAAGGACA ACGCTTAGTA ATTA AAAATA GAAATGGCGA  | 480  |
| 10 | TAAAATTATC GGTGTTGTTT CTAATATACC TAAACATTTT CGTACTGGTA GTGAAGGTGC   | 540  |
|    | ACCGGAAATT AAAGATTTAA CATTAGATAT AGGTGCTCAA AATGAAGATG AGGTGCGTGA   | 600  |
|    | gCGCGGAATA GATATAGGAG ATACAATTGT ACCTCACACG CCATTCCACAC AGTTATCTGA  | 660  |
| 15 | ACATCGATAT AGTGCTAAAG CATGGGATAA TCGTTATGGT TGTGTCTTGG CAATTGAAAT   | 720  |
|    | ACTAGAATTA TTA AAAGATA TAGAATTAGA TGTAGACTTG TATGTTGGCG CAAATGTTCA  | 780  |
| 20 | AGAAGAGGTT GGATTACGAG GTGCGAAAGC ATCTGCAGAG ATGATAGACC CAGACGTTGC   | 840  |
|    | ATTTGTAGTT GATTGTTTAC CTGCCAATGA CGTTAAAGGA AACCAACCAT TATCTGGTGA   | 900  |
|    | ACTTGGTAAA GGGACGT TAA TTCGCATAAA AGACGGTACA ATGATTTTAA AGCCTGTATT  | 960  |
| 25 | TAGAGACTAT TTATTAAGT TAGTAGAAGC ACATGACATT GAACATCAAT ACTATATGTC    | 1020 |
|    | ACCAGGTGGA ACAGATGGTG GAGAAATTCA TAAAGCTAAT ATTGGTATTC CGACTGCAGT   | 1080 |
|    | TATTGGTGTA TGTGCACGAT ATATTCATAG TACAGACTCA GTATTTGATA TAAGAGACTA   | 1140 |
| 30 | TTTTGCAGCT AGATCTTTAC TTTCAGAAGC CATTTGTAAT TTAGATAATA ATCAAATAGA   | 1200 |
|    | AACATTACAA TATAAATAAT CGGGTAATAA CAACTATTAT CTCTAAATAG TTATATATAA   | 1260 |
| 35 | TCATTAATTA AGGAGACATA AAAATGAAAC AACTTGAATC AGAACACAA TTTGAATCTT    | 1320 |
|    | TAAAACAAGG TGCTACAGTA TTTGAATTCA CTGCAGGCTG GTGTCCAGAT TGTAGAGTGA   | 1380 |
|    | TAGAACCAGA TTTACCGGAA TTAGAAGCGA GATATCCTAT GTTTGACTTC GTATCAGTAG   | 1440 |
| 40 | ACCGTGATAA ATTTATGGAT ATTTGTATTG AAAATGGTAT TATGGGTATT CCAAGTTTTT   | 1500 |
|    | TAGTATATAA AAATGGAGAA CTGCTTGAA GTTATATTGG AAAAGAACGA AAATCAATTG    | 1560 |
|    | AACAGATAGA TGCATTTTTA GCTCAATACG TGTAATTTAG ACTAGAGAAA AACGGGGTAA   | 1620 |
| 45 | TACTCGTTTT TCTCTGTTAC TATGTGTTGA TTTATTGTAA ACTATTATAA GGTGCGAAAT   | 1680 |
|    | TAGGAGTGTT ACATATGAAT ACCTTTCAAA TGAGAGATAA ATTAAAGGAA CGTTTAAGCC   | 1740 |
|    | ATTTAGACGT TGATTTTAAA TTTAATCGTG AAGAAGAAAC TTTGCGTATT TATCGAACAG   | 1800 |
| 50 | ATAATAACAA AGGTATCACG ATTAACTTA ACGCTATAGT CGCAAAATAT GAAGATAAAA    | 1860 |
|    | AAGAAAAAAT TGTAGATGAA ATTGTTTATT ACGTTGATG                          | 1899 |
| 55 |                                                                     |      |

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 3774 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 660:

10 GTATAATATC CTTTCAATCT GTTTTCATAT TTTATATATT TTTTAAATAT AAGTGCTAAA 60  
 TGTTTAACT AAAGCATAGA TTGACAAGAT GTTATACAGA ATTTCAAATT CTATCCAATA 120  
 15 TTGTTGGAAG TGTAATATCA CTGGATTGGT ATTAAACAAT GTAAAGGAGA GATTGCAAAT 180  
 GCCGTATAAT TACAAGAAAC AAAATGGAGA GTTAATGTCT GTAATGAGCC AAGGTGAAAA 240  
 GTTTATTTCAT CAATCACCCG TTAATGATGA ACTTAGTGCA TTGATTAAGT TATTAATTTTC 300  
 20 TAAATTAAC GGTGTGTCATT ATTGTGTTGA TATCCATAAA AAAGAATTAA AGGAATTGGG 360  
 TGTAACACAA ATGAAAATTG ATGAAGTCTT GAGTTTTAGA CATTTAGATT TATTTACTGA 420  
 TCAAGAAAAA GTGACGCTTG AATTTGCAGA AATGTTAAAT TCAATCAAAG ACTTTAAGAA 480  
 25 GTTTGAAATT ATTGACCGGC TAAATCATT TTATGATGAA GAACAAATTA TTGATCTTGT 540  
 CTTTGTGTA AACCAATTA ACGTTGGAA CAGATTAAAT ATTATTAGTG ATAGACTATA 600  
 ATTGTTTATA TAAATGCAGA GTTTCATCTC GAACGCTATA TCATAACAAA TCATGCCACT 660  
 30 ATACAGGTCA AATCTGTAT AGTGGCATT TAATTTATCC CTTTGAATAC TGTTATTTAA 720  
 CGAATATCGG TCCACCTGGT CCAACAGGGA TACCTAATAG GAACCAAATG ATGACAAATA 780  
 35 CTGTCCATAC AATACTTAGC GCGATTGAAT ACGGCATTAA ACTAGAAAGT AAGGCTCCGA 840  
 GTTTCATGCG TTTATCGTAT TTTTGTGCAT AAGTTAATAA TAAAGGTAAG TACGGCATCA 900  
 TCGGTGTAAT TGGATTGGTA ATTGAATCGC CTACACGGTA AATGACTTGT GTGAATGCGG 960  
 40 GATGAAAGCC GATAAGGATT AACATTGGTA CGAATATCGG TCCTAAAATA CCCCATTTAG 1020  
 CCGATGCGCT TCCGATTAACT ATGTTGACCA TTGCACTCAG TACAATAATA CCTAGTATCA 1080  
 ATACAATACC GTTTTGATGT TCTAATAATT TGGCACCTTT AACAGCAGCG ATAATTCCTA 1140  
 45 AATTACTCCA CTTTAAATAC GCAAGTAGCT GTGCTGCAAA AACACAATA ACGATAAATG 1200  
 TTTCCATTGA TCCTACAGCA TCGCCGAACA TTTTACCTAA GTCTTTTGTA TTTTAAATTT 1260  
 CTTTGCTTAA AATCCCATAA ACTAATCCAG GACTAAAAA TACGACAAGA ATAATTAATC 1320  
 50 CGACACCGTT AATTAATGGC GCATCGTCTA GTAAGCTGCC TGTTTTCAGCA TTTCTTAAAA 1380  
 AGCTATGTTT AGGAATGGCT GTAATAATTA ATAAATAAT TGTGACTATG AAACGTATAT 1440



|    |                                                                   |      |
|----|-------------------------------------------------------------------|------|
|    | CATCATGCAT TAAACTGTCA TCATATTTTC CTAATCTAGG AATAATGAGC TTAGTTGTAA | 1560 |
|    | CTAGCAATAT CGTAGGAAGT AATACAACGA CACTCGCTGC GATAAAGTAC CAGTTCATAG | 1620 |
| 5  | CAACGTTTGT TTTAATAGAA TCTGAAACGA TACGTGTTGC CGGTTCTGTA AATGAATAGA | 1680 |
|    | CCAAAGCATC TTGCATACCA ACAACTATAT TTGCTGCAAA TCCTCCAACA GCGGAAGCAT | 1740 |
|    | ATGCCATCGT TAGTCCAGCG ATAGGGTGAT AGCCAATTTT AATAAAAAGC ATTGCTGCAA | 1800 |
| 10 | GCGGCGGCAA GATAATTGTC GCAGCATCGC CGGCTGTACT ACCTAAAATA CCAATTAATA | 1860 |
|    | TAATAGTCGG TAAAATTAAG AACGTGGTG CGCGATTAC AACAGAAATC ATTAACCTAT   | 1920 |
|    | CGAAGTATCC TGTTTTCTCT GCAACACCAA TACCAATCAT CACTGCTAGT ACTAAGCCTA | 1980 |
| 15 | ATGCTGGGAA CTCTGAGAAA TTTTAATCG TATCATTCAT TATCATCGTA AATCCATCAT  | 2040 |
|    | GGCTAATTAT ATTTTAAATA TAAATGGTTT GATGCGTACC TGGATGCTTA ACAGATACAT | 2100 |
| 20 | TAAATAATGA GATAACCCAT GTCATAATGG CTAAGCCCAC ACACATTAAA AAGAATAAGA | 2160 |
|    | CGCTAGGATC TGGCAATTTA TTTCCGATTT TTTCAACACT ATTCAAGAAA CGATTGACGA | 2220 |
|    | TAGACCCCTT TTGTTGATGT TTTGATGTCA TCAATTATTC CCCCCTTTGT TAAATATTTA | 2280 |
| 25 | AAGTGTAACA AAAAATACTC TCAAAAGTAA CAATTTTCAG GAAATAAAAA AACTAATATT | 2340 |
|    | GTTAAATATT TTGAGTTATT CAATAGAAAG TGTATAGCAG AGTAGTTAAG ACTGCCTGAA | 2400 |
|    | GACTTATCTA TTAGGTTTAT GAAGCATCGA ACAGTGGAAA ATAAGGACTG TAAGTTTAAG | 2460 |
| 30 | ATATGTTGTA TAGGAGTGAC TGAATGAAAC GTTTGGAAAA TAAAGTAGCA GTCGTAACAG | 2520 |
|    | GAGCAAGTAC AGGTATCGGT CAAGCTTCTG CAATCGCTTT AGCTCAATAA GGTGCGTATG | 2580 |
| 35 | TATGGCGGT AGACATAGCT GAAGCGGTAT CGGAGACTGT CGATAAAATT AAAAGTAATG  | 2640 |
|    | GTGACAATGC GAAGGCGTAT AATGTGGATA ATGCAAGCGA ACAACAAGTG GTAGACTTTG | 2700 |
|    | TGTCTGACAT AAAGGAACAG TTTGGAAGAA TCGATGTGTT GTTTAATAAT GCCGGTGTGG | 2760 |
| 40 | ATAATGCGGC TGATAGAATT CATGAGTATC CAATAGATGT GTATGACAAG ATTATGAATG | 2820 |
|    | TAGATATGCG TGGGACATTT TTAATGACGA AAATGATGTT ACCTTTAATG ATGAATCAAG | 2880 |
|    | GTGGCTCTAT TGTTAATACG TCTTCATTTT CCGGACAAGC AGCAGACTTG TATCGCTCTG | 2940 |
| 45 | GATATAATGC TGCGAAAGGT GCAGTGATTA ATTTTACAAA ATCAATCGCA ATTGAGTATG | 3000 |
|    | GCCGTGATAG CATTCGAGCC AATGCGATTG CACCAGGTAC AATTGAAACC CCGTTAGTAG | 3060 |
|    | ATAAACTGAC AGGTACGAGT GAGGATGATG CAGGTAAAAC ATTTAGAGAA AATCAAAAAT | 3120 |
| 50 | GGATGACTCC GCTGGGACGT TTAGGTAAAC CAGAAGAAST TGCTAAATTA GTAGTCTTCT | 3180 |
|    | TAGCATCTGA CGACAGTTCA TTCATAACTG GAGAGACGAT TCGAATTGAT GGTGGTGTGA | 3240 |
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AATTATTTTAA AATCGATATC CAGTGGAAAA GAATTTGGCA TGAAGTAGGC AATGTATGCA 3360  
 TATTGTCGCA ATGAAAGACA TTAAAGCGG AGATTAATTA ATCTTTGAAA ATCACATATT 3420  
 5 GTTCATTTGA AGTGTATTGC TTAAAGCTTG TTTAACGTA TTGTAGGTCG TGCATCTAAT 3480  
 TTATCAGAAT CTCGAGTTCA AACTTTTGGG GTATCTTTAA AATAAGCTGT ATTTTGTCTA 3540  
 10 TTCTAATAAA TTAAGGAGAA TTTTATGTTA AAAGAAAAAG AAAGTTTGTAG ATTGCTATAT 3600  
 CAAGCTATAA GAGAGATTGC AGATAAAATT GGAGATAATC AGTTAGAAAC TAATTCCGTT 3660  
 AGTTTATcAT tATTGGACTT TGATTTTGAA CATGAAGTAT TTGATGAATT GTATCTTGTC 3720  
 15 ATTTtAAAAT ATTTAAATAC AGTAAGTATA GAGAACATAA GTCATAGTGA GCTT 3774

(2) INFORMATION FOR SEQ ID NO: 661:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1078 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 661:

TACTGGTTTT GGATTTTGGG GGTAATACAG TACCTAATAG TAATnATGGT GTCGTCAnAA 60  
 TTATATCTTT CCGTGATGTT CTTACTCATT AGAACATChG CCTTCAGAGG AATCATGATA 120  
 30 CGAGGAATAA GAAATTTAAA TGTGAGCGAA GTCAATATAG TATTTGCGAT TATTTTTATT 180  
 AACTCCATTA TTATTGTTAG TTTGATTTTT CGAGGATAAC TTCAATTTTT GCATTTTGAG 240  
 35 GTTTTTTAAC ATATCTATTT GCATCAGTTG ATGGCAACCT TTTACTTAAA TCTATTGTGT 300  
 AGTTATTGTC TGCACCTGTT ATTTTAATTT GTCCTTTATT ATAAGAATTA TTATATAATT 360  
 TTTTACTTTT AATTAATGTT TGACGAATAC GAAAATCTAA TTCTTTTAAA GTTAAAACAG 420  
 40 GCTTATTGCC TTCATAAACT GGAAATCCGC CAGTAAACGT TTCTGCTTTA TCTTTATATG 480  
 TTACATTCAG TTTATAGTGT TTATCGTTAG ATGTTGCTGC AGGAGTAACA CCACCAGTAA 540  
 ACGTTTCTTG AGATAATGCA AAAGaATCAA TGGTTTCTTG GTCTTTTATG CyAAAAATAT 600  
 45 CAACGCTTTT ATTTCTTAAT TGGTTGATAT TGCCCCAACT TTCAGGTCCA TAAACTTGAA 660  
 TATGACTATA CCAAGaAAAC TGTAACAACG TTGCATGAAT CgTACCGTTA TCTTTTGCC 720  
 ATAACGTAAT GTTAGAGAAG GTTAAATATT TTTGCGAGTA ATATTTAGTT AACTCATTAA 780  
 50 CGTTAGTTTC GTTTTGATTT ATATAAtAAG cTTTCGCTTC AGATGAAGAA TTGATAkGTG 840  
 TATTAGGAAA TTGTGTAGAT GCTGTACCTA ATAGTAACAA TGTTGTTGAT AAAATAATTT 900

ATAAAAAGGG GTTAATTAGA TAATTGAAAT TATCCGCATT TACAAAAGGT AATAGGTTAG 1020  
 TTAGATTTTT CGAGTATGAC TcAATTCTG CATTACGAGG ATTTTAAACA TAACGGTT 1078

5 (2) INFORMATION FOR SEQ ID NO: 662:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1398 base pairs  
 (B) TYPE: nucleic acid  
 10 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 662:

AACCTGCTTT TTAGTATCTA CGTTAATATT AATAGCTTTA ATTCACTTG TATTAATTAA 60  
 ATCAGCTGTG TAAATACCTG CTTTCAAATC GATAACTTTC TTTGTTCCAT TTTTAAAGTA 120  
 20 AACAGTATAT TTCGCTTGCT TCGATAGTCT TAAATCTATA TCACTAATAC CTCTGTCTGA 180  
 TTTTAAACT GATTAACTC TATCCTCTAA ATCTTTATAA CTAATATTTT GATTCTTATT 240  
 AAATGTTAAG CTGATAAAA TATTTTGGCT TGTACCGTTC ACAGTgATTG CATATGGAAC 300  
 25 ATGGACTTTA GAATATCCAT GGTGTAACGA ACTTGATGAT TTATCTAATG GCTTAGCTGC 360  
 GGCAGACGCT TCATTATTAT TAAAGTTTGC ACCTGTTGAT GCTAAAACAC CTAATGCTAA 420  
 AGTTGTTGTA ATCAATGACT TAAATTTTCAT AAATTATCTC TCCTTTTTTG TGTAATTCGT 480  
 30 ATTTGCAACT TAATTATAGC CAGACTTTCT CTATTTTTTG AATTAACTGA ATATTAATAA 540  
 TAAATTATCT TTAACAATAA TTTTTTAAACA CTGTTAAAG TTCTTTTAAT TTTGATTAAC 600  
 TAATTAATTT ACAATACCTA AAATGTTGTT TGGTTTTGTT TATACCAAGC TTCAAACCTA 660  
 35 AATGTCATAA CAACATTCAT TTCTTAATTC CTATTAGATT TGTCGATTAT ATTTACAGCA 720  
 TCTTTATACT CAAAAACAT TTACTTAAAA ATATAAATTC GATTTAATAA TTAATTTAAA 780  
 40 TTTAGTTAAT CAATTTTGCA TCTATTTTGT TGTAAGCTAT ATAAAAGGAG TGATAATGAT 840  
 GGTGAAAAAA ACAAATCCA ATTCACTAAA AAAAGTTGCA ACACTTGCAAT TAGCAAATTT 900  
 ATTATTAGTT GGTGCACTTA CTGaCAATAG TGCCAAAGCC GAATCTAAGA AAGATGATAC 960  
 45 TGATTTGAAG TTAGTTAGTC ATAACGTTTA TATGTTATCG ACCGTTTTGT ATCCAACTG 1020  
 GGGGCAATAT AAACGCGCTG ATTTAATCGG ACAATCTTCT TATATTAAAA ATAATGATGT 1080  
 CGTAATATTC AATGAAGCAT TTGATAATGG TGCATCAGAC AAATTATTAA GTAATGTGAA 1140  
 50 AAAAGAATAT CCTTATCAA CACCTGTACT CGGCCGTTCT CAATCAGGGT GGGACAAAAC 1200  
 TGAAGGTAGC TACTCATCAA CTGTTGCAGA AGATGGTGGC GTAGCGATTG TAAGTAAATA 1260

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CAACAAAGGC TTTGTTTATA CAAAAATAGA GAAAAATGGT AAGAACGTTT ACGTTATCGG 1380  
TACACATACA CAATCTGA 1398

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(2) INFORMATION FOR SEQ ID NO: 663:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1200 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 663:

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TTGTAATTGG AACGTACGAA CTTTTCTAGG TAAGAAACGT CGAATCTCGT CCTCATTATA 60  
 ACCAACTTGT AGTCGTTTAT TATCTAAAAT AATTGGACGA CGTAATAAGC CAGGATTATC 120  
 TTGAATGATT GAATATAAGT CTTGTAATGG TAGTGAATCA ATATCAACAT TTAATTTTTG 180  
 GTATGTTTTA GAACGTGTAG AAATGATTTT ATCAGTACCG TCTTCAGTCA TTTTAAATAT 240  
 TTGCTTAATT TCATCAATTG TTAAATGTTT AGAAAAAATA TTACGCTCCG TATACGGAAT 300  
 GTCCaATGTTT tTGkTAACCA TGCTTTTCGCT TTTACGGcAA GATGTGcAaC TTGGtGaAGT 360  
 aAATAATGtT ACCATACATC TCACTCTCCT ATTTGAATGA ATAAAATTCA TTGCTTAAAA 420  
 TTTAGTTATA GATCAAGAAA AAACATTTTT TTCTAAAATT CTTAATCGTT ACTATTTATT 480  
 ATAACATCTT AACATTAAAA TTAAATGAGA AAAACCTAAT TTTTCAGATA AGTTTCTACA 540  
 CTTATAAAAA AGATTATTAA TCCCTTTGTT AGTAGTAAGT TATACGTATA TTCTAACACA 600  
 TCTTACATTT TTAAGAAATA CTGTTATAAT GATAATTATT AAAATATTAC TAAGAAAGTA 660  
 GGCATTTTAAA TGGAGACATT ATTTTCAGGC ATCCAACCTA GTGGAATTCC TACTATTGGA 720  
 AATTATATTG GCGCACTAAA ACAATTGTTT GATGTGCAAA ATGACTATGA TTGTTATTTT 780  
 TGTATCGTAG ATCAACATGC AATTACAATG CCACAAGATC GTTTAAAATT ACGTAAACAG 840  
 ACCAGACAAT TAGCAGCGAT TTATTTAGCT TCTGGTATAG ATCCAGACAA AGCAACATTG 900  
 TTCATACAAT CTGAAGTCcC TGCACACGTA CAAGCAGGAT GGATGTTAAC TACGATTGCT 960  
 TCTGTTGGAG AATTAGAGCG TATGACGCAA TACAAAGATA AAGCTCAGAA AGCAGTTGAA 1020  
 GGTATACCTG CTGGTCTATT AACATATCCA CCTTTAATGG CAGCTGATAT TGTTCTTTAC 1080  
 AATACTAATA TCGTTCCAGT TGGAGATGAC CAAAAGCAGC ATATCGAATT GACTCGTAAC 1140  
 CTTGTAGATA GATTTAATAG TCGCTATAAT GATGTGCTTG TGAACCTGAA ATTCGTATGC 1200

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(2) INFORMATION FOR SEQ ID NO: 664:

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(A) LENGTH: 787 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 664:

|    |                                                                    |     |
|----|--------------------------------------------------------------------|-----|
| 10 | TGTACCTTTT GCTTTAATAA ATACTGTTTC TTTATCATAA TTAGGTTTCAG TTAAGAAATT | 60  |
|    | AAATTGTAAG CTTTGAGTAA TATTTTTTTG ACTATCACTT GTTGTAGCTG TACGTGTATA  | 120 |
|    | CATTTTAGTA TCACCATCAA GATTCTTCTC AGAAACTTGT TTGATTTTCAG AATTAATCTT | 180 |
| 15 | TGCAAATGAA GTAGCTGGTA ATACAGTGAA AGTAGTCGAT AGTGCTAAsG wACAAATTGT  | 240 |
|    | GATATTTTTA CATAGTTGTT TAATCATTAG TAATCCGCCC TTTCAATATT ATCCTTCTTT  | 300 |
|    | ATAAGGTTTA TTGTCATCAG AATATTTATC AACGACTTTA ACTGTTTTAT TTTTCCAATC  | 360 |
| 20 | AACTTCATAA GTGACAATTA ATCTTTGACC ATCTTTATTT TtcTCTAAAA TTGGAGGTGC  | 420 |
|    | ATAATGTATy CCAGGTCTGT TTTTCAAAAT ATCTTGATTT CGTGTGTATG TTACTTCAAA  | 480 |
| 25 | TTGCGTTTTT TCATTGACT TTTCATTAGA TAAATAAGTT AAAAATTCTG GATTAAAGCC   | 540 |
|    | ACTTCTTACT AATGCTGGGT ATCTATATTT TGAAGCAAAG CTTAGTTCaG GGTTCCTAC   | 600 |
|    | AGTAGCAATT CTCGTATTTT TATAGAATAA TAATTCATCA TTTCTATTTT TCACTTCTCC  | 660 |
| 30 | ACCATACTTC AAGTCATTTC CAATAACTGA CCAGTGTACA TGgCCAGTTh ATTTATTTTT  | 720 |
|    | ACCGCTGGCA ATTGTGTCAT AATTGCTGTC ATCATCAACT AATCGTTTTG GAAGTAGCTA  | 780 |
|    | TTTGCTG                                                            | 787 |

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(2) INFORMATION FOR SEQ ID NO: 665:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 533 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 665:

|    |                                                                   |     |
|----|-------------------------------------------------------------------|-----|
| 10 | TTATCTGTCA TTAACCACTG GTACATGTGA ACCCGGCnTh AATCAATATA TATATTTAAA | 60  |
|    | AGCAAAGGCG CGCCATGTGC CTTTtTTnTA tTTTGATAT CTGTATCAAA ATCGATTGA   | 120 |
| 50 | TTAAAATCCG CTTTATTTTA TCATCTATTC AAATGATTTT AGTGCGCTTA TTTTACTATG | 180 |
|    | GCATTATTGC CTAACCTGTT TGAGATATAT TAATATTTGA TGATTGCTAT TCAAAGTTT  | 240 |
| 55 | CATTTAACAT GTATTTAGTA TCATGATAGC TGCTTCATTG ATGATATACT ACCTACTTTT | 300 |

CAGAGGCAAT ATTGAACAAT TCTTCATCAT GACTATTTTC CATCACATAA CTATGCTTAG 420  
 CGAACGCTAA CATATCTTTA TCATTATTCG CATCTCCGAA GGCCATGAGC TCTGAAGGAG 480  
 5 ACATTTCCCA TTTATCTAAC AATCGTTTTA ATGCCTGnCC TTTAGTCATG TTT 533

(2) INFORMATION FOR SEQ ID NO: 666:

10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 666:

GACTTCTCTT GCACTAAAAA TTGCTCAAAT TGCTCGCTGT CATAACCAGG CGGTGTTTCC 60  
 20 AACCATACAT ATATGCCACC TTTAGCATGA ACAAATGGCA AATCAGCTTT TGCAAGCATG 120  
 GCTTCGAATC GGTACGACG TGTTTTAAAT ACATTGCTTT GTTCTTCTAA AAAATCATCA 180  
 25 TAATGGATTC AAAGCATATA TTGCGGTCAT CTTGTAAATG CACCAAACAT CCCAGCATTT 240  
 GTGTGCGTTT GGTACTTTTT CAAAGCTTGA AATCATATCT TTATTACCAA CTGCCAAAAC 300  
 CGACTCTGAA AACCTGGACA TGTTGATGAA CCTTTnAGAC AAGGGAAGAA ATTTGCAATC 360  
 30 GCAACATCTT TGCCCATTTT nCCGAAGCAA GTGnGACTAG 400

(2) INFORMATION FOR SEQ ID NO: 667:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 412 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 667:

TCTCCAATGC TACTCAAATT AAAAAGGTTT TAAATATTGT TAATTCTGAT CCAGAGCGAA 60  
 45 AGATTGTTAT CGTTTCTGCT CCAGGTAAAA GACATGATAA TGATATTAAA ACAACTGATT 120  
 TGTTAATCAG ATTATATGAA AAGGTCATTA ATCATCTTGA TTATCATGAT AAAAAAAGAG 180  
 AAATTATTCA GCGTTATGAT GATATTGTAA AAGAATTGCA AATGGATGAA AGTATTTTAC 240  
 50 GGACGATAGA TGTGACTTTG GAACATTATA TAAATCAATT AAAAAATGAA CCAAAGAGAC 300  
 TATTAGATGC ATTACTTTCT TGTGGTGAAG ATTTTAATGC GCAyTGAtA GCyTTATATA 360  
 ATAAtAGTCa gGtACCAAC AAmATwTATA TCCcCGAAGG AAGCGGGTAT TT 412  
 55

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 668:

|                                                                    |     |
|--------------------------------------------------------------------|-----|
| TTACTCGTTA AAGATATTGT AAAAGATGAA GTGACAGAAT ATGACATTCA TCAAATGTTA  | 60  |
| CCGCATCCGA TTAATATGGT AAGGGTTAGA CTTTTGGTG TGAAATTAAA AGAGATTATA   | 120 |
| GCTAAAAGTA ATAAACAAGA nTATATGTAT GAACATGCAC AAGGTTTGGG TTCAGAGGG   | 180 |
| AATATATTTG GAGGATATAT TCTTTATAAT TTAGGGTACA TTCATTCTAC AGGGCGTTAC  | 240 |
| TATCTGAATG GAGAAGAAAT CGAGGACGAC AAGGAATATG TACTAGGTAC GATAGATATG  | 300 |
| TATACGTTTCG GTCnTATTnC CCAACATTGA AGGATTACCA AAGAGTATTT AATGCCAGAG | 360 |
| TTTTTCAGAG GTATATTTAA nGAAAATTAT TGGCTATTTA                        | 400 |

(2) INFORMATION FOR SEQ ID NO: 669:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1236 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 669:

|                                                                   |     |
|-------------------------------------------------------------------|-----|
| TGTTGATAT TTTTAAATTT ATCTTTTAAA TACAACAAC TTTCCGTAA TGATTAACT     | 60  |
| GTTTTATGAC TAATGCCATT GAATATTTCT AGCGTTTTAT TTAACCTATC GATAATCGCA | 120 |
| TGTAAATCCT TCAAATGTC TTTTGTTC AAGTAAATA CATTATGGAA GCGATGAATA     | 180 |
| TCATCATCAT AAACATCAGA ATCATTGATA ATCGTAAATA TCGTTGAGAA CAATTGCTCA | 240 |
| TTTAACTCAT GAATCTCATT CATACTAGCC TTCAAGCCAA AAATATCAAT TGGTGCAATA | 300 |
| TCTAATTTTT CCAAATTCG CTGCTTTTCC AGTTGATCAA TTGCCTTTAA CAATTTTTCA  | 360 |
| TTTCGTTTT TACCAATCAA ACCAAGCTGA TATTTAATAT CAGCATAACT CAACTCATTT  | 420 |
| GTCATTGAT TTAAGGCATA GTCTGGTAAG CGATGTGCTT CATCCACTAT ACAATCATCA  | 480 |
| AACAATTGAT ATATTGAATT TTCAACATCA GAATGaATTA AATGTGCATG ATTTGTAATA | 540 |
| CCAATTTGaA TGTTCTGTGC ATTTGCTTA ATAAAATTAT aATAATGAAC ATCGTGACGT  | 600 |
| GCCGGTACAT ATGTTTCAAT TTTCTGGTcA AAATACATCT TTTGACCACC TTTTAAATTT | 660 |

ATATTCACtT CGTAATTACT TGTGTCATCT TTTAAAAATT GACTAATAAG CCCCAAATGAA 780  
 ATGTAATCaC TtTACTTTT AATCAATAGT GCATTAAATT TAAAATTCAA CGCTTCATTC 840  
 5 ATTGCTGGAA TATCTTTTT TAACAATTGA CTTTGCAGTA ATTTAGTATT GGTAGAAATC 900  
 ATGACATGCT TCCCAGTTTC AATATTATAC ATCAAGGCCG CAAGTAAATA TGCTAATGAT 960  
 10 TTACCACTGC CTAGTGATGC TTCAATCATT GCTTTTTTAC TATGCATGAG CTGATCTAAT 1020  
 ATAGTTTCCG CTAAATATAA TTGTTGCGGT CGATATGTTA AGCCAAGTTG ATCTACAGCT 1080  
 TTGCTATATA AAGACTTCAA GCTGCCATTA TAATTTGTTG TCGGCTTTTT AAAATCAACT 1140  
 15 TGCTTACGAT AGATAATCTG TTCGAACTTT TCGTACGATT TATCCAATGG CTTTGCATCA 1200  
 TATTGCCTAA CCATCTCAAA GAAAATATCA TACAAA 1236

## (2) INFORMATION FOR SEQ ID NO: 670:

20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1819 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 670:

30 ACaSaATTAT TGACCAATAT GACTCGTGGA CTGATATGTT TAAAGCACTA CTGCATGAAA 60  
 CATTTAAAGC ATATGGCGTT CTATTTATAG ATGCGCAGTT TGAGCCGTTA AGAAAAATGG 120  
 AAGCGCCTAT GTTTAAAAAG ATTTTGAAAA AACATCAGTT GCTTGATGAT GCTTTTAGAG 180  
 35 CAACACAACA ACGTACTCAA AATCAAGGCT TGAATGCGAT GATACAAACA GATACAAATG 240  
 TTCATTTATT CTTACATGAT GAAAATATGC GTCAATTAGT tTCGTATGAT GGTAAGCAyT 300  
 TTAmATTAAA TAAAACAGAT AAGACATATA TAAAGGAAGA AATTATAAAT ATTGCGGAAA 360  
 40 ATCAACCKGA ATTATTTTCT aATAATGTAG TGACAAGACC ATTAATGGnA GAATGGTTAT 420  
 TTGAACACGG TGGCATTGTG TGGAGGACCG AGTGAAATTA AGTaCTGGGC TGAACAAAA 480  
 45 GATGTATTTG AACTATTTGA TGTTGAAATG CcAtCGTGA TGCCAAGGCT TAGAATTACT 540  
 TATTTAAATG ACCGTATAGA AAAATTACTT TCGAAATACA ATATTCCATT AGAAAAAGTG 600  
 TTAGTCGATG GTGTTGAAGG AGAAAGAAGT AAGTTTATTA GAGAACAAGC ATCACATCAA 660  
 50 TTTATTGAAA AGGTAGAAGG TATGATTGAA CAACAGCGTC GTCTAAACAA AGACTTATTA 720  
 GATGAAGTGG CGGGGAATCA AAATAATATT AACCTTGTTA ATAAAAATAA TGAAATTCAT 780  
 55 ATACAACAGT ATGATTATTT GTTAAAACGT TATCTTTTAA ACATTGAAAG AGrAAACGAC 840



GAAAGAATAT GGAATCCACT TCAAATTTTG AATGATTTTG GGACAGATGT GTTCAAGCCC 960  
 TCCACCTATC CACCACTTTC TTACACTTTT GATCATATTA TTATAAAACC TTAATATACC 1020  
 5 AAGGGTTTTAG CCCGATTTAT CTTAATGATA AATCGGGCAT TTTTGTGTTT TTTAAAATAA 1080  
 ATTTACACAA TTTTGTATAA ATAGTGGTGG ATAGTGGGGA GATGTGGTAA ATTATATATA 1140  
 10 AGGTGAGGTG ATAAAAATG TTCATGGGAG aATACGATCA TCAATTAGAT ACAAAGGAC 1200  
 GTATGATTAT ACCGTCCAAG TTTCTTATG ACTTAAATGA GCGTTTTATT ATCACAAGAG 1260  
 GCCTTGATAA ATGTTTATTC GGTTACACTC TAGACGAATG GCAACAGATT GAAGAGAAAA 1320  
 15 TGAAAACCTT ACCTATGACA AAAAAAGACG CACGTAAAGTT TATGCGTATG TTCTTCTCTG 1380  
 GTGCTGTTGA AGTAGAACTT GATAAGCAAG GCGGTATTAA CATCCCTCAA AACTTGAGGA 1440  
 AATACGCTAA TTAACTAAA GAATGTACAG TAATCGGTGT TTCAAATCGT ATTGAGATTT 1500  
 20 GGGATAGAGA AACTTGGAAT GATTTCTATG AAGAATCTGA AGAAAGTTTC GAAGATATTG 1560  
 CTGAAGATTT AATAGATTTT GATTTTAAA ATGGAGGAAT TGAAGtGTTT CATCATATCA 1620  
 GCGTTATGTT AAACGAAACC ATTGATTATT TAAATGTAAA AGAAATGGT GTGTACATTG 1680  
 25 ACTGTACGCT AGGTGGAGCG GGACAnGCCC TTTATTTACT AAATCAATTA AATGACGACG 1740  
 GAAGATTAAT AGCAATCGAT CAAGACCAAA CTGCAATTGA TAATGCTAAA nGGGTATTAA 1800  
 30 AGGATCATTT GCATAAAng 1819

(2) INFORMATION FOR SEQ ID NO: 671:

(i) SEQUENCE CHARACTERISTICS:  
 35 (A) LENGTH: 609 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 671:

ACCAATTATT GGACAGGAAT TAGCAAAAAA TGCAATGCTT GCATTAATCT ATGCATCGAT 60  
 45 AGGTATCATC ATCTATGTAT CATTACGATT TGAATGGCGC ATGGGTCTTT CATCTGTATT 120  
 GGCATTATTA CATGATGTAT TCATTATAGT AGCGATTTTC AGTTTATTTA GAATTGAAGT 180  
 AGATTTAACA TTTATCGCCG CTGTATTAAAC AATTGTCGGT TATTCAATTA ATGATACAAT 240  
 50 CGTAACGTTT GACCGTGTAC GTGAAAACCTT ACAAAGGTT AAAGTGATTA CGACAACAGA 300  
 ACAAATTGAT GATATCGTTA ATAGATCAAT tAGACAGACA ATGACACGTT CAATTAATAC 360  
 55 AGTATTAACA GTTATTGTAG TAGTAGTTGC TATACTATTC TTCGGTGCTC CTACGATATT 420

TGCCGTTCCG CTATGGGGAA TAATGAAAAA ACGTCAGTTG AAAAAATCGC CGAAACACAA 540  
 ATTAGTTGTA TATAAAgAAA AGAAATCGAA CGATGAAAAG ATTTTAGTTT AAAAtGaATT 600  
 5 AAGCGGTAT 609

(2) INFORMATION FOR SEQ ID NO: 672:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 2222 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 672:

CTTAAACAG CAATTTGAAC GTTTACAAAA TGAACAAATC TTTGTTTATG TTTGTCATGG 60  
 20 TAATCACGAT CCTTTATCAT CAAAGATTTT ATCAAACTGG CCAGATAATG TtntTTGTATT 120  
 TTCAAATAAA GTTGAGACGT ATGAAGCAAT TACTAAATCT GGTGAAACAA TTTATATTCA 180  
 CGGATTTAGT TATGAAAATA GAGCAAGTTA TGAGAACAAG ATTGATGAAT ATCCATCAAG 240  
 25 TCAAGGCCAA AAAGGCATAC ATATTGGTGT CTTCATGGT ACGTATACTA AATCTTCAGT 300  
 TAACGAAAGA TATACCGAGT TCATTTTAGA AGATTTAAAC AGTAAATTGT ATCATTATTG 360  
 GGCTTTAGGT CATATACATG AACGTCAACA ATTAAGTGAT ATGCCTGTAA TTAATTATTC 420  
 30 AGGTAATATT CAAGGTAGAC ATTTTAAATGA GCAaGGTGAA aaAGGTTGCT TATTAATCGm 480  
 GGGTGACCAC TTAAAAATTAA AGACTAAATT TTATCCTACA CAGTATATTA GATTGAAGA 540  
 35 AGCAACTATT GAAACGGATA AGACATCTAA GCAAGGTTTA TACGAGGTCA TTCAAACTT 600  
 TAAAGAACAA GTGAGAGAAG AAGGAAAAGC CTTTATCGT TTAACGCTTG TTATTAATAG 660  
 TGAGACATTA ATTTACCTC AAGATTTATT ACAAGTTGAA GAAATGATTA CAGATTATGA 720  
 40 AGAAAACGAA AATCAATTTG TATATATTGA TGAGTTAAAA ATACAATATG CACAAAATGA 780  
 TGAGTCACCT TTAGTTAATG AATTTTCAGC GGAATTATTA GTCGATCAAA CTGTTTTTGA 840  
 TAAAGCGATG TCAGATTTAT ATTTAAATCC AAGGGCATCT AAGTTCCTAG ACGATTATGG 900  
 45 AACATTCGAC CATAAGCAT TAGTTAATCG TGCTGAAGAA ATATTAAAAG CTGAAATGAG 960  
 AAGTGAACAA AATGATAATT AAATCACTTG AAATTTATGG TTACGGTCAA TTTGTTCAaC 1020  
 50 GTAAAATTGa ATTTAATAAA AAcYTCaCTG AAA1TTTTGG TGAAAATGAA GCGGGTAAAT 1080  
 CGACGATTCA AGCATtCATC CATTGATAT TATTTGGATT TCCAATAAA AAGTCTAAAG 1140  
 AGCCAAGACT AGAACCACGT CTAGGTAACC AATACGGTGG TAAATTAGTA CTTATTCTTG 1200

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TATATTTACC TAATGGTGCT GTGCGTGATG ATGCTTGGTT ACAAAGAAA CTTAATTATA 1320  
 TTTCTAAAAA GACATATCAA GGTATCTTTT CATTTGATGT ACTAGGGCTT CAAGACATTC 1380  
 5 ATAGAAATCT AAATGAAAAA CAATTGCAAG ATTATTTATT ACAAGCmGGG GCTTTAGGAT 1440  
 CAACTGAaTT CACGTCAATG CGCGAAGTGA TTAATCGTAA AaaAGATGAA TTATATAAAA 1500  
 aATCAGGTAA AAATCCGATC ATTAATCAAC AAATTGAGCA ATTAAAACAA CTAGAAAGTC 1560  
 10 AAATTCGTGA AGAAGAAGCA AAGCTAGAAA CATATCATCG CTTAGTAGAT GATCGAGATA 1620  
 AATCATCACG TCGATTAGAG AATTTAAAGC ATAATTTAAA TCAATTATCA AAAATGCATG 1680  
 AAGAAAAACA AAAAGAGGTT GCTTTACATG ATCATTACACA AGAATGGAAG TCTCTAGAAC 1740  
 15 AACAGTTAAA TATTGAGCCA ATCACATTCC CAGAAAAAGG TGTGGATCGT TACGAAAAAG 1800  
 CACGAGCGCA TAAGCAATCG TTAGwAAGAG ATATTGGTTT AAGAAATGAG CGTTTAGCTC 1860  
 20 AACTTAAAGA AGAAGCGACT CAATTAGAGC CAGTTAAACA ATCTGATATT GACGCCTTCA 1920  
 TTAGTTTGAA TCAACAAGAA AATGAAATTA AAAATAAAGA ATTTGAACTT ACTGCAATCG 1980  
 AAAAGGATAT TGCGAATAAA CAACGTGATA AAGATGAATT GCAATCAAAT ATTGGTTGGT 2040  
 25 CTGAAACGCA TCATGACGTA GATAGTTCAG AGGCAATGAA AAGTTATGTC AGTGAGCAAA 2100  
 TCAAGAATAA ACAAGAACAA GCTGCATACA TTAAACAATT AGAACGTAGT TTAGAAGAAA 2160  
 ATAAAATCGA AGATAATGCG GTTCATAGCG AACTAGATTC TGTGAAGAA AAATAGTTCC 2220  
 30 TG 2222

(2) INFORMATION FOR SEQ ID NO: 673:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 406 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 673:

45 TTGCAGGTAT CATTTTTTTA ATGCCATATG GATTATGTTT TCTACCGTTT TATAAGCAAA 60  
 AAAAGAAAAA ACAGACATTT AAAAAATACA TGGTTTACAC TACGATTGGT TTGTCAATTT 120  
 GTCTAGGCTT ATCTCTAGTT TTGGTTCACA CTACGAAAAT TTATATGGAC GAAGGTGGCG 180  
 50 TAAGATACTA TTACGGTAGT TTTGTAATGA AACAAGCGGG CGGTTATGCT TATTTAGCTT 240  
 TAGCGGTACT TTCAACGTG TTAATTGTTG CGAAAAAGC TACAAATAAA AATAAGAAA 300  
 TCGAAACCGT CGACAATACA AATATAACGG AAAGATAATT AAGGGAGTGC TCATTCAGGA 360

55

## (2) INFORMATION FOR SEQ ID NO: 674:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 927 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 674:

CCACTTTGTG GATTTTCTTT ATATTCTCCA CGCTTGtACT ACAACTTCTT TCGTTTCTGT 60  
 TTCATCACCG ACTGCCGCAT TCGTTAGCAC ATGTAATAAC TCTTTTGCGG TTAATACATT 120  
 CTCATCTATA ATCTTATCTT TTTGTTCTTG TATATATTGC TTGATGTGCG GCTTTTTCOA 180  
 TAACCTACAC GCTGTCACAT GTGCGCTATT TGC GTTATAT CCTGyTTTTA TGGCACTTTG 240  
 TGTACATTC AGTGTCTAA TATACTCATT CACAAAACGT GCTTGCTTTG CAGTTAACTC 300  
 ACTCATTTTA TCACCCCCAC AATTTTATCT AATATGGTTT CATACCATAA TATTACAGAT 360  
 TGTCTGAAC AATCTAAGGC ACTACTAATA TCTTGATAAC TAAGTCCTTG TATAAGGGAG 420  
 TCAAAAATAT AAAACTCTTT ATCGGTCGCT AATCTGTCAA CAATCATTTT TATGTGATTC 480  
 TTTATAATAT GATCATTGAC ATTATCGTCT GTCATCAATT CGTCAGAATC TTCATCACCT 540  
 ATTAAAAAGA AATCATCAGT ATTTATTTCA TCATCGCCCC GTTAACTAGC TTTGAAGTCT 600  
 TTAGCACACT TGCATATACC GGCTGTCGTG CTGGCKAGAT ACTAGCATTG AAGTGGTCTG 660  
 ATATTGATTT TGAAAACAAC ACGATTAGTA TTAATAAAAC ATATTACAAT CCAAATAATA 720  
 ACAAGAAGAA ATATCAGATA CTTCCCCCTA AAACGTAAAG TTCTATCGGT AAGATTTCCG 780  
 TTGACCCAAA TGTAATAAAG GtGtTGCGtG ATTATAAGAT AAACGTTCAA AATAATTGGA 840  
 AAAACGAATT ATATAATGAT AACCATTGTA ATGAAAAAAC TATCAATGTG GATACAAACC 900  
 ATTATGTCAC GTACCAGCAT ACTCAA 927

## (2) INFORMATION FOR SEQ ID NO: 675:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1100 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 675:

GATGTTAAaA TAAGTACATC ATTTTGACTC CCAAATATTG GCTTTAGACC TTGAAATGCT 60

CTCATAATGG CATCAGGTAC cAGGGGTTGG GaCCAGGTGT TAATAACAAC GGTTGATGAT 180  
AATACATTTA TATGCCTCCT ATAAATAAGA TTCTACTATT TTAGCAAATT TTCTGAAAAT 240  
5 TTAAGAGCCT AAAAagtGAT AACGCTATAT TGTCGAACAA ACGTTATCAC TTAACGATTT 300  
TATTTGGCCT GAATGATGGG ATAGATTTTT ATGTCCACAT TATTTCTTAC AGCATTTGAA 360  
ATCATGCAAT TATTATCTGC AATTGTTATC AATTTTGGTA ATCGCTTTTC TAATTGTGCT 420  
10 ATTTGATCAC TTGGAATTTG AATTTGAGGA TGGTGACAA TTTTGGACAT ACTGAATTTT 480  
CCGTTATTTA AACAAGCTGT TCCAATCGAT TGTGTkCAA TTGAAATATC TGTGAACTTT 540  
GCACGTTCAG GAGTAGCTGC TAATGAGATG ATATAACATG ATGAAGCGGC TGATACTAAC 600  
15 ATTTTCATCGG GATTGTGTTCC TATACCAACA CCACCTAAAG AAGCAGGTAT AGAAATATTC 660  
TCTGAAAGTA TGTCGCCTTG AACGTTTCCG ACATTGTTAC GACCACCTTG CCAAGAAGTT 720  
20 TGGACTTTAA AGTCATGTTG ATGCAATTGC TTTAACCTCC AATATAATTG TGATAGTTTA 780  
ATTTTAGAAT AGTTTATCAA AGTTTAACAG AAAGGTGACT TATCAATGAC TCTGAATAAA 840  
CTGAAAGATG AATTACAAAT TGTTTCGCAC CGTGGATTGC CGAGTGATT TCTGAAAAT 900  
25 ACAATGGTCG GTTATCGAGA GGTAATGGGG CTCAATGTTG CTATGTTAGA AATAGATGTT 960  
CATTTGACCA AAGACCAACA TTTGTGTGTG ATACATGaTG AAACAATTGa TAGAACATCG 1020  
GaTGGtArGG GGCGTAwTgC TGaTTACACA TTATCGCAAT TAAATCATT TGATTTTGGT 1080  
30 AGTTATAAAG ATGTTGCTTT 1100

(2) INFORMATION FOR SEQ ID NO: 676:

35 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 460 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 676:

ATTAATTTCA TATGGAAATA GTTGAACATA CTGCGCTGTA TAAGCTTCAA CAGTTTGATG 60  
45 AATTAACGAT TGATCTTCAA TATATCCGTA GAACAAATCT TCAGTACAAA CTACTTTACC 120  
TTTATCAGGT TTAATTGCAC CTGCCAACAA TTGACCTACC AACGCTTTGG AAGATTCAGG 180  
TTCACCAATT ATACCTAAIG CTCTCCTTG ATAAATATGT AACTAATAT TGTTTAAATC 240  
50 GATATCTTCA GCATCATATC CAAAAGGTAA ATACCATTTC TTATTCTGTT TATTCCTATA 300  
GTAGTGTGTT ACTTTTAGTA ACTTTAAAAC AATTGAACCT CCCATCTATT TTCATCCTTC 360

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CCCCACGCaA AAATACCTTT TAATCTTnCT ACTTTAAAAT

460

(2) INFORMATION FOR SEQ ID NO: 677:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1451 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 677:

|    |                                                                    |      |
|----|--------------------------------------------------------------------|------|
| 15 | GTCAAGTTTT CGGCTAGATT TTAAACGCTC ATCACTATGT AGAATGAAAC TTTCGAAAAA  | 60   |
|    | CTGTAAATCA TCATAACCTT TTACATAAAC ATAACCTTCG CCACCAATTG CTGAATTAA   | 120  |
|    | ACATTGGGCG GCCATTTGAA TTTCTAAAGA TTGTTTTTCT AGCCTATTAA AGATACCTAT  | 180  |
| 20 | TAGTTGTGTG TTTAAGATTT TTGACATCTT TATCCTCCAA TCTACTTATA AAATATTGTA  | 240  |
|    | ATTAATGACT ACATATTATG CAACGCTTA AATTGTATAA AAATGTATAC GTTTGCATTT   | 300  |
|    | AGTATAACTA TCGCATTTTT CAAAAAATAC ACATTTAATC TGCAGTATTT CAATGCATTG  | 360  |
| 25 | ACGCTATTTT TTIGATATAA TTACTTTGAA AAATACGTGC GTAAGCACTC AAGGAGGAAC  | 420  |
|    | TTTCATGCCT TTAGTTTCAA TGAAAGAAAT GTTAATTGAT GCAAAAGAAA ATGGTTATGC  | 480  |
|    | GGTAGGTCAA TACAATATTA ATAACCTAGA ATTCACTCAA GCAATTTTAG AAGCGTCACA  | 540  |
| 30 | AGAAGAAAAT GCACCTGTAA TTTTAGGTGT TTCTGAAGGT GCTGCTCGTT ACATGAGCGG  | 600  |
|    | TTTCTACACA ATTGTTAAAA TGGTTGAAGG GTTAATGCAT GACTTAAACA TCACTATTCC  | 660  |
| 35 | TGTAGCAATC CATTTAGACC ATGGTTCAAG CTTTGAAAAA TGTAAGAAG CTATCGATGC   | 720  |
|    | TGGTTTCACA TCAGTAATGA TCGATGCTTC ACACAGCCCA TTCGAAGAAA ACGTAGCAAC  | 780  |
|    | AACTAAAAAA GTTGTGAAT ACGCTCATGA AAAAGGTGTT TCTGTAGAAG CTGAATTAGG   | 840  |
| 40 | TACTGTTGGT GGACaAGAAG ATGATGTTGT AGCAGACGGC ATCATTTATG CTGATCCTAA  | 900  |
|    | AGAATGTCAA GAACTAGTTG AAAAACTGG TATTGaTGCA TTAGCGCCAc ATTAGGTTCA   | 960  |
|    | GTTCATGGTC CATACAAAGG TGAACCAAAA TTAGGATTTA AAGAAATGGA AGAAATCGGT  | 1020 |
| 45 | TTATCTACAG GTTTACCAT TATTATTACAC GGTGGTACTG GTATCCCGAC TAAAGATATC  | 1080 |
|    | CAAAAAGCAA TTCCATTTGG TACAGCTAAA ATTAACGTAA AACTGAAAA CCAAATCGCT   | 1140 |
| 50 | TCaGCAAAAAG CAGTTCGTGA CGTTTtAAAT AACGACAAAG AAGTTTACGA TCCTCGTAAA | 1200 |
|    | TACTTAGGAC CTGCACGTGa AGCCATCAAA GAAACmGTTA AAGGtAAAA TAAAGAGTTC   | 1260 |
|    | GGTACTTCTA ACCGCGCTAA ATAATTAATA TTTAGTCTTT AAGTTATTAA TAACGTAGGG  | 1320 |

AATAAATAAA ACAGTTTGAT TTTAAATGA AAGCGTAAAA ATGGTAAAAT ATATCAAAAT 1440  
 TGATTGTGAT A 1451

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(2) INFORMATION FOR SEQ ID NO: 678:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 668 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 678:

nGTATTGAAG CGGTAAACA AACACCTAAT GCAACTGACG AAGAAAAGCA GGCTGCTGTT 60  
 AATCAAATCA ATCAACTTAA AGATCAAGCA ATTAATCAAA TTAATCAAAA CCAAACAAAT 120  
 GATCAGGTAG ACACAACTAC AAATCAAGCG GTAAATGCTA TAGATAATGT TGAAGCTGAA 180  
 GTAGTAATTA AAACAAAGGC AATTGCAGAT ATTGAAAAAG CTGTAAAGA AAAGCAACAG 240  
 CAAATTGATA ATAGTCTTGA TTCAACAGAT AATGAGAAAG AAGTTGCTTC ACAAGCATT 300  
 GCTAAAGAAA AAGAAAAAGC ACTTGCAGCT ATTGACCAAG CTCAAACGAA TAGTCAGGTG 360  
 AATCAAGCAG CAACAAATGG TGTATCAGCG ATTAAAATTA TTCAACCTGA AACAAAAGTT 420  
 AAACCAGCTG CACGTGAAAA AATCAATCAA AAAGCGAATG AATTACGTGc TAAGATTAAT 480  
 CAGGATAAAG AAGCAACAGC AGAAGAAAGA CAAGTAGCAC TAGATAAAAT CAATGAATTT 540  
 GTAAATCAAG CCATGACAGA TATTACGAAT AATAGAACAA ATCAACAAGT TGATGATACA 600  
 ACAGTCAGCG CTgATAGCtT GCTTTAGTGA CGCCTGACCA TATTGTTAGA GCgCTGCTAG 660  
 AGATGCGT 668

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(2) INFORMATION FOR SEQ ID NO: 679:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1906 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 679:

GATCCAAATT TAAAGGAAA AATAGCCTTt AACGAATTTA CGAAACAAAT TGAATGTTTA 60  
 GGGAAAGTGC CATGGAATAC TAATTTTAAG ACACGTCAAT GGCAAGACGG TGATGATAGC 120  
 AGTTTAAGAA GTTATATCGA AAAGATTTAT GACATACACC ATTCAGGTAA AACAAAAGAT 180

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|    |                                                                   |      |
|----|-------------------------------------------------------------------|------|
|    | ATCGTGGGAT GGACATAAAC GCCTTGAAAA GTTATTTATC AAATACTTAG GTGTTGAAGA | 300  |
|    | CcTGaAGTGA ATAGAACAAC TACCAAAAAA GCATTGACTG CTGGAATCGC TAGAGTAATG | 360  |
| 5  | GAGCCTGGAT GTAAATTTGA CTATATGCTT ACACTTTATG GTCCTCAAGG TGTAGGTAAA | 420  |
|    | TCTGCTTTGC TAAAAAATT AGGTGGTGCA TGGTTTCTG ACAGTTTAGT TTCTGTTACA   | 480  |
|    | GGTAAAGAAG CTTATGAGGC CTTACAAGGC GTTTGGCTAA TGGAAATGGC AGAACTTGCA | 540  |
| 10 | GCTACAAGAA AAGCTGAAGT TGAAGCTATT AAGCATTTCA TATCTAAACA AGTTGACCGA | 600  |
|    | TTTCGTGTTG CTTATGGGCA TTATATTGAA GATTTTCCAA GGCAATGTAT TTTCATTGGT | 660  |
|    | ACAACTAATA AAGTTGATTT CTTAAGAGAT GAAACTGGTG GAAGACGTTT TTGGCCAATG | 720  |
| 15 | ACTGTAAATC CAGAGAGAGT TGAAGTGAAC TGGTCTAAAC TAACCAAAGA TGAGATTGAC | 780  |
|    | CAAATTTGGG CAGAAGCTAA ACACTATTAT GAACAAGGAG AAGATTTATT CCTTAACCCT | 840  |
| 20 | GAACTAGAAG AAGAAATGCG TTCAATACAA AGCAAACATA CTGAGGAATC TCCATATACA | 900  |
|    | GGCATTATTG ATGAATATCT TAACACACCm ATTCctAGCa ATTGGGATGA CTTAACTATC | 960  |
|    | TTTGAACGAA GACGATTTTA TCaAGGTGAT GTTGATATGT TACCaaCAGG AAATGTaGAT | 1020 |
| 25 | TACGTTAAAA GAAATAAAGT CTGTGCGCTT GAAGTGTTTG TTGAATGTTT TGGTAAAGAT | 1080 |
|    | AAGGGAGATA GTAGAGGATC TATGGAAATT AGAAAGATTT CAAACATCTT AAGACAATTA | 1140 |
|    | GACAATTGGT CTGTATATGA TGGTAATAAA AGTGGGAAAA TTCGATTGG AAAAGATTAT  | 1200 |
| 30 | GGTGTACAGA TAGCTTATGT AAGAGATGAA AGTTTAGAGG ATTTAATATA AGAAATATTG | 1260 |
|    | AATAAATATG CATTTTAGAG TGTGTATCA GATGTTGCAT CATTTTTTGA GTGATGCAAC  | 1320 |
|    | ACGGGAGTGT AAAAAGTAAT CGTAGGTGTT GTATCATTTT TGGTGATGCA ACATTGATGC | 1380 |
| 35 | AACAAATGAT ACAACACCTC TTTCCTTTCT AGCTGTAGGG TTCAACCCTG TTGTTTCCA  | 1440 |
|    | ATGTGTCATC AAATTCACTA TAAAGTTTAA AAAGTAGTGT TAGGGAGTAA AGGGGTATAG | 1500 |
| 40 | GGGTAACCCT CTAACAGCTA TTTTAAAAAG TTTGGCAAGA ATTGATACAA CATCGGAACA | 1560 |
|    | CAAATATAAA TTTTGTATAC AAGGTGAATA AATGAAAGAA TCGACATTAG AAAAATATTT | 1620 |
|    | AGTGAAAGAG ATAACAAAGC TAAACGGTTT ATGTTTAAAA TGGGTCGCAC CTGGAACAAG | 1680 |
| 45 | AGGTGTGCCA GATAGAATTA TTATTATGCC AGAAGGAAAA ACATATTTTG TAGAAATGAA | 1740 |
|    | GCAAGAAAAA GGAAAGTTGC ATCCTTTACA ArAATATGTG CATAGACAAT TTGAAATAG  | 1800 |
|    | AGaTCATAAA GTaTATGTCT TATGGAATAA AGAACAAGTA AATACTTTTA TCAGAwTGGT | 1860 |
| 50 | AGTGAACATT TGGCGATTGA CTTTCAAACC ACATAGCTnT CCAAAG                | 1906 |

(2) INFORMATION FOR SEQ ID NO: 680:

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(A) LENGTH: 948 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 680:

|    |                                                                    |     |
|----|--------------------------------------------------------------------|-----|
| 10 | AATTATTTGA ATAAATTAGC AATTAAAGAG TTGATTTGTC AGTTTAAGyA TTTGAGTGCA  | 60  |
|    | TTTGAAAAAG ATGTCATGTA TTTAATGTGT GAACAATATA AGCCGAGAGA AATTGCTCAA  | 120 |
|    | TTGATGCATG TAAAAGAGAA AGTGATTTAT AATGCCATAC AACGATGTrA AAATAAAATA  | 180 |
| 15 | AAACGTTATT TCAAAATGAT TTGAAAAGCG CCTTAGGACG TGAATTGAAT TATAACGTGT  | 240 |
|    | TACTTACTGA TGGTTTGACA TTTGTTATAA ATTTTATGTA TAGTATACTG GTATTATAAT  | 300 |
|    | GAATAAAGGT GAATTATTGT GAGAAAAATA CCTTTAAATT GTGAAGCTTG TGGCAATAGA  | 360 |
| 20 | AATTATAATG TTCCTAAGCA AGAAGGCTCG GCAACAAGAT TAACCTTAAA GAAATATTGT  | 420 |
|    | CCAAAATGTA ACGCGCACAC AATTCATAAA GAATCGAAAT AAATACATTG GAAATAATAC  | 480 |
|    | TTTGATAATA TGTTCAAAGG ATTTGGAGGT TGAGCAGATG GCTAAAAAAG AAAGTTTCTT  | 540 |
| 25 | TAAAGGCGTT AAGTCTGAAA TGGAAAAAAC AAGTTGGCCG ACGAAAGAAG AGCTATTTAA  | 600 |
|    | ATATACTGTA ATTGTAGTTT CTA CTGTTAT ATTCTTCTTA GTCTTTTCT ATGCCTTAGA  | 660 |
| 30 | TTTAGGAATT ACAGCATTGA AAAATTTATT ATTTGGTTAG AGGAGTGAAG ACATGTCTGA  | 720 |
|    | AGAAGTTGGC GCAAAGCtTG GTATGCAGTG CATAATATT CTGGATATGA AAATAAAGTT   | 780 |
|    | AAAAAGAATT TAGAAAAAAG AGTAGAATCT ATGaATATGA CTGAACAAAT CTTTAGAGTA  | 840 |
| 35 | GTCATACCGG AAGGAAGAAG GAAACCTCCA GTAAAnAAGnT GGCCAAGCCT AAAACCGCCT | 900 |
|    | GTAAAAAAA ACCATTCCCC TGGGnTanGG TTTTAAGTGG GAATTTAA                | 948 |

(2) INFORMATION FOR SEQ ID NO: 681:

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(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 863 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 681:

|    |                                                                   |     |
|----|-------------------------------------------------------------------|-----|
| 50 | ACAnATAATA ACAAAGCGCT 1GCTAGTACC TCTTAAAAAG ATGATGCTAG CAAGCGCTTk | 60  |
|    | TCTATACTAT ATATTATTTT TCTAAAAATT TAACACCCTC TTGAGTGCCT ACAATAACTT | 120 |
|    | GATCTGCCAT ATCTAAGAAG TATCCTGTCT CAAACACACC TGTCAGATGA ATTAAATACT | 180 |

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TATCAGTTAT AAATGCGACA TCTTCGTTTA CACGACGTTT TACTTTTATA TCAGCGTATG 300  
 ATTC AATTTT ACCTAATATG TGATACCAGT TAAATTTATC CACCTCTACT GGTAACCTAA 360  
 5 ACGTCTCACC TAAGTATTGA ACTATTTTCG TTTCATCGAC AACCACAACA AAACGCGATG 420  
 CCATTTTCATC TATAACTTTC TCTCTGAACA GCGCACCACC GCCACCTTTA ATTATATTTA 480  
 AAGATGGATC TACTTCATCA GCACCATCAA TTGCTAAGTC GATATGATCA ACATCATTGA 540  
 10 TTTCACATAT TTTAATACCT AATTCTTTTG CTA AAAATGC AATTTTATTA GAAGTGCATA 600  
 CACCTGTAAT ATTGTAACCA CGTTCTTTAA TTAGTTGCGC CATTTGAGGT AAGAGTAATT 660  
 CCATGTACT TCCTGTACCA ATTCCCAGCG TCATGTCACC ATTGATTkGA CTTAAAACAT 720  
 15 CATTTAATGT CATTAACTTG AGTGCTTTGA CATCTTTCAT GAAGGTAGCC TCCCATATTT 780  
 AtGTAATCTA TTCAATTCAT ATTTTACATG ACTCGTATAA ATTAACATAC CCTTATnGCT 840  
 20 AACCATTTGT GTTAAACATA TCG 863

(2) INFORMATION FOR SEQ ID NO: 682:

(i) SEQUENCE CHARACTERISTICS:  
 25 (A) LENGTH: 480 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 682:

TTCAATTTTG TTGTT CAGCA ATTTTGGTCC GAATTTCAAT TCATCAGATG ATAGCTCTAT 60  
 35 TAATTCTGTA GAATATTCTG CtACAACAAT TTCATAAATA TGGCCTTTTT CTTCCATTAT 120  
 TATTTTCATCa ATTATTTTCAT AATTCAATTG TTGTAATGTT TGTCTTAAAT TTTCAGTTTG 180  
 GATATTACTT TGTA AAATCA ACCTTGATG TTGACTTAAC TTATCTTGCC CATCTTTTAA 240  
 40 AATTTTAGCA ATAAGTGGTC CGCCCATACC ACAAATTGTG aTATTATCGA TTACGTCCTC 300  
 AGGTGAATA AACTTAAAGC CATCCCCTAA ACGTACATCA ATTCTATCTA CTAATTGGTT 360  
 TGCAGCTACA TTTTTCACAG CAGCTTGAAA AGGGCCTTGA ATA ACTTCTC CAGCAATAcc 420  
 45 GaTTCGCATA AATGGTTTTG AATTGCATAG ATTGGCAAAT AAGCATGATC TGAGCCAATA 480

(2) INFORMATION FOR SEQ ID NO: 683:

(i) SEQUENCE CHARACTERISTICS:  
 50 (A) LENGTH: 689 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 683:

CTGCAAAAAA TATTGGTATA ATAAGAGGGA ACAGTGTGAA CAAGTTAATA ACTTGTGGAT 60  
 5 AACTGGAAAG TTGATAACAA TTTGGAGGAC CAAACGACAT GAAAATCACC ATTTTAGCTG 120  
 TAGGGAAACT AAAAGAGAAA TATTGGAAGC AAGCCATAGC AGAATATGAA AAACGTTTAG 180  
 GCCCATACAC CAAGATAGAC ATCATAGAAG TTCCAGACGA AAAAGCACCA GAAAATATGA 240  
 10 GTGACAAAGA AATTGAGCAA GTAAAAGAA AAGAAGGCCA ACGAATACTA GCCAAAATCa 300  
 AACCACAATC CACAGTCATT ACATTAGAAA TACAAGGAAA GATGCTATCT TCCGAAGrTT 360  
 15 gGcCCAAGAA TTGAACCAAC GCATGACCCA AGGGCAAAGC GACTTTGTTT TCGTCATTGG 420  
 CGGATCAAAC GGCCTGCACA AGGACgTCTT ACAACGCaTA AcTACGCACT ATCATTcAGC 480  
 AAAATGACAT TCCCACATCA AATGATGCGG GTTGTGTAA TTGAACAAGT GTACAGAGCA 540  
 20 TTTAAGATTA TGCGAGGAGA GGCGTATCAT AAGTAAACT AAAAAATTCT GTATGAGGAG 600  
 ATAATAATTT GgAGGGTGTT AAATGGkGGA CaTTAAATCC mCGTTCATTC mATATATAAG 660  
 ATATATCACG GTAATTGCGC ATATAACTT 689

(2) INFORMATION FOR SEQ ID NO: 684:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 858 base pairs  
 (B) TYPE: nucleic acid  
 30 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 684:

TTATTAAATT GGTATGTGTT CATTATACAT ATGaCAAATA TGaATGTAAA CCGATAATTT 60  
 AGATTTTTTG GAATAACCTG AAAATTCAAG TTaTAGCGTT GCTTATATTT TAAAAGGTGG 120  
 40 TGATAATGAG ACTTTTTGAA AAATAAAATT CAAAATACTT ATAGCATAAT CAATATGCAC 180  
 ATTAAATAAA TGTACTCTTT TAATGCGTTG ATAAGTGTAT TTGTAATTTA GAGAAGGGGT 240  
 GTTCACTATG CTGATGTGTT AAAAAATAAA ATAAAAAGGA CACCTCGATG CTATAAATAT 300  
 45 TAGCATCGAG ACGCCAGTT AATGTCTATT AAATTGAATA TAGTCTCGGA CATGAATCAA 360  
 TGCCCTAGGC CCTGCAATGT TATATTGACA GTAGTTGACT GAATGAAAAT GACTTTGTAG 420  
 50 CTAGCTTTTT TCAATCCTTG TCGGTGCAAC ACATAGAGAA ATTGGATTCC TAATTTCTAC 480  
 AAACAATACA AGTTGCGGAA TAAGTCCCAA TATAGAAGGT GACAGTAAGC CAACTTACAA 540  
 TAATGTGCAA GTTGGTCGGG CCTCAATACA GAGATTTTCG AAAAGAAATT CTACATATTA 600

GCCACCTTGT TTATTTAAAT CGATAACACG GTTTCGATT GTATTGATAA ATTCAAAGTC 720  
 ATATGAAGTA AAGATAATAG AACCTTTGAA TGATTTAAGT CCATCATTA CAGCAGTAAT 780  
 5 ACTTTCTAAG TCTAAGGGTT GTGGGTCATC AAGTAAAAGA CGTTGCCCTG ATAACATCAT 840  
 TTAGTAGCAn CACGACTT 858

(2) INFORMATION FOR SEQ ID NO: 685:

10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1747 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 685:

20 TTAGTATTTT CAGGnTGGAA ATTGATGTTT GAAATTCAC T GAAATGGGCC AGAACCTgAA 60  
 ATGaAACTTT ACCAACAATT TGGtCTTCAT CAATGAGGCC AAACGCACGG CTATCTTTAC 120  
 TTAGTTCACG ATTATCTCCA AGCACTAAAT ATTTACCTTT TGAATGACA TTGATTTAG 180  
 25 GATTTCGATT CGGTAAATCT TTAACCTGGA AAGTCCCAGT AATGTAATCA CCTGTTTAT 240  
 GTTTTAAATT GTAGTTTAAA TATGGTTCAT CTGTTTTTTT ACCATTGACA TATAATGTAT 300  
 CATTTTTGTA TTCTACTTTA TCACCAGGAA CACCGATGAC ACGTTTAACA TAGTCATCAT 360  
 30 TTTTGTGTC ATGGAAGACA ACTACATTAC CTTTTTCCAA ACCACCTGTT TTATATCCAA 420  
 CAATGTTTAC AGCTACTCGC TCGCCATCTT TCAAAGTTGG ATCCATTGAT TCACCTTTAA 480  
 35 TTGTATATGG CGTAACAATA AATTACCTA CTATAAATAA AATGACAAAA GCGACTGCAA 540  
 TTGAAATAAT CCATTCCAAT ATTTCTTTTT TCAATTTTGA CACCTCTTTT TAAGATTTGA 600  
 ACTGAACAGT CCATTTTGAA AAAGGATAGT ATCGTAAAct AACATTACCA ATAATatCCT 660  
 40 TTTTATCGAT TAAACCAAAT TGTCTTGAAT CGTGCTTGtK ATTATCTTGA TCATTTAGCA 720  
 CAACAAAATT GTTTGGCGGA ATAATATCAC CATCTAATTC TTTAAAATTG CGCAAACTAA 780  
 AATCTTTAAT TTTTCTGTTC TTGGCATAAG ATGCGTCAAC CGGTCGGTCA TCACGGTATA 840  
 45 ATTGTCCCTG ACGAAACGCC ATTGATTGAC CAGGTTTGGC AATAATTCTGA CTAGTATATA 900  
 TCTCGTTACC ACGCCTATAT GTAATGATAT CACCATTATT CAATTGATTA AATGTAACCT 960  
 50 TAATTTTATT TACAATAACA CGATCCCCTT TGTTAAGGGT TGGTGACATA TCATTATTCG 1020  
 GAATGACATG ACCAACTATT ACAAAGTTT GTACGAACAG TACAATGATA ATAGCAAGTA 1080  
 TCAATGAAAT CAAATATTTT ACAACTTTTT TCACGATGTC ACTCCTTTTT CGATCCATA 1140

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ATCCCTCTTA AAGGATGCGT TAAAATTGTA GTAATTTCCT TACCTAAATA ACCTAAAATA 1260  
 ATGTTGAAA CTAAC TTGA TGATGCCAAA ACAATGAAAT AATATTTAGG TCTAATATGA 1320  
 5 GATAGACTCG CTACAAAATT TATTAATGTA TTTGGCGTAA AAGGAAAACA AAGTAAAATA 1380  
 AACAAATGGGA TTAATCCTTG GCGATCAATA AAATAATCA AGCGTTGAAC AGCAGTACGT 1440  
 TGTTTAATTC GCTGCATCCT CTCAGTGTTT ACCAATCGTT TACAGATCAA ATAGACTGTA 1500  
 10 AATGTTCCAG AAATTAATCC AAGCCAACTA ATCAATATAC CTAAATAGG TCCATAAGCT 1560  
 TGAATGTAA TTAATAATATA GAGTGCTAAA GGAAATACTG GAATTATAGC TCTAATATAT 1620  
 15 AACAAATATA ATCCAGGTAA ATAACCAAAC TGTCGAAATA TCTCAAACCA TTCTTCTACT 1680  
 TGATGAAACG ACAAATCATC AATCCCTTTC TTTGGTTGAA GATAATTATT CTTACATTAT 1740  
 AAAGTTA 1747  
 20 (2) INFORMATION FOR SEQ ID NO: 686:  
 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 645 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 686:  
 30 CGTAAAGATT ACTATTTAGG AGGGTGACTA TGAAAAAGAA ATTAGGTATG TTACTTCTTG 60  
 TACCAGCCGT AACTTTATCA TTAGCCGCAT GTGGGAATGA TGATGGAAAA GATAaAGATG 120  
 35 GCAAGGTAAC AATTwAAcGa CaGTTaTCCm TTGCAATcAT TTgCAGAGCA AATTGGTGGA 180  
 AAACACGTGA AGGTATCATC AATCTATCCA GCAGGGACAG ATTTACATAG CTATGAACCA 240  
 ACACAAAAAG ATATATTAAG TGCAAGCAAG TCAGACTTGT TTATGTATAC AGGGGATAAT 300  
 40 TTAGATCCGG TTGCTAAGAA AGTTGCATCT ACTATCAAAG ATAAAGATAA AAAACTGTCT 360  
 TTAGAGGATA AATTAGATAA AGCAAAGCTT TTAAGTATC AACACGAGCA TGGTGAAGAG 420  
 CATGAACATG AGGGACATGA TCATGAGAAA GAAGAACATC ATCATCATCA TGGTGGATAT 480  
 45 GATCCACACG TATGGTTAGA TCCTAAAATT AACCAAATT TCGCTAAAGA AATTAAAGAT 540  
 GAATTAGTGA AAAAAGATCC AaAACATAAA GATGACTATG AGaAAACTA CnaAAATTAA 600  
 50 ACGACGATCT TAAGAAAATT GATAACGATA TGAAGCAAGT TACAA 645  
 (2) INFORMATION FOR SEQ ID NO: 687:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 956 base pairs  
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(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 687:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| TTTGTTACTG | CTTCTAAAAT | AATATCCTTT | AATTGTTTAA | CATGTTGGAT | TGTCATATGA | 60  |
| GGTGATGGTA | CATTAAAAGG | ATTTAATTCA | TCTATTTGTG | CATATTGATT | TATGACATCT | 120 |
| TGATGCATTG | AAATAGGGTT | GATATCATT  | GTTACTACTT | TATTAGATTG | GTCTGTGAC  | 180 |
| ATACTAATGG | TGCCACCAGT | ATGAATAACA | AGTAGATGTT | TCATATATTT | CCTCCTATAT | 240 |
| TTAATTTACC | TAATTATGAT | AAAATATTAT | TCATAAAACG | ACAAGGAAGG | GAAATGACGC | 300 |
| ATGAAAGCCA | TTAATATTGC | ATTAGATGGT | CCAGCTGCTG | CCGGAAGG   | TACAATTGCG | 360 |
| AAACGTGTAG | CCAGCGAACT | ATCAATGATT | TATGTCGATA | CAGGAGCAAT | GTATCGTGCA | 420 |
| TTAACATACA | AATATTtAAA | ATTAAACAAA | ACTGAGGACT | TTGCAAACT  | AGTTGACCAA | 480 |
| ACAACATTAG | ATTTAACTTA | TAAAGCAGAT | AAAGGTCAAT | GTGTCATTTT | AGATAACGAA | 540 |
| GATGTAACAG | ACTTTTTAAG | AAATAATGAT | GTGACGCAAC | ATGTTTCATA | CGTTGCATCT | 600 |
| AAAGAGCCAG | TACGTTTATT | CGCCGTTAAA | AAACAAAAAG | AGTTAGCTGC | AGAAAAAGGT | 660 |
| ATCGTAATGG | ATGGTCGCGA | TATCGGAACT | GATGTGCTAC | CAGATGCAGA | TTTAAAAGTA | 720 |
| TATATGATTG | CATCAGTTGA | AGAGCGAGCA | GAAAGAAGAT | ATAAAGATAA | TCAATTAAGA | 780 |
| GGTATCGAAT | CAAATTTTGA | AGATTTAAAA | CGTGATATTG | AAGCTCGTGA | TCAATATGAC | 840 |
| ATGAACCGTG | AAATATCACC | ATTAAGAAAA | GCAGATGATG | CAGTGACATT | AGATACGACm | 900 |
| GGCmAGTCGA | TTGAAGAAGT | TACTGACGAn | ATTTTAGCGA | TGGTGAGTnC | AATTnA     | 956 |

(2) INFORMATION FOR SEQ ID NO: 688:

(i) SEQUENCE CHARACTERISTICS:

|                   |                 |
|-------------------|-----------------|
| (A) LENGTH:       | 1166 base pairs |
| (B) TYPE:         | nucleic acid    |
| (C) STRANDEDNESS: | double          |
| (D) TOPOLOGY:     | linear          |

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 688:

|            |              |            |            |            |            |     |
|------------|--------------|------------|------------|------------|------------|-----|
| AAAAGGGAGG | AAAGAGAACA   | GTTAAATATG | AATACAAAAT | AATTTTGT   | TCGGACAGCA | 60  |
| GGGGTATTAG | ACGCGATTGA   | CAATGTCtGT | TTAATTAAAC | GTAATGTTTA | TTTAAGCGAT | 120 |
| GAATATTAGG | TGAAAAGTTT   | TTGAATTTGA | ATGTAATTGA | GGTTTATTGA | TTAGACATTT | 180 |
| TATTGAATTG | CGTGTATTATTA | TATAAATGTA | AAAATAAGAC | GACATGCGCG | AACATGTCGT | 240 |

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TAATGCGGAA TGGTTTTTTT ATTTTCCGCT AATTGAAATA AAAATGACGT TTAAATATAT 360  
 TATGGGCTAG GTGGTTTGTA AGAAAGGGTT AGTTATTAAT GTTTTATGAA TTAAGGAAAT 420  
 5 TTGAGTTTAA GGTTTAATCA ATTGTGATTT TGTGATGAA GCGTTTAGTT AGAGTATTTT 480  
 CGCCACCACT AGTTACTCCT TCTCCCACTT TACCCGAGAC TGGAGAAGAg CTATCTGAAG 540  
 AATAAATAGA TACTTTTTTG CCATTTTGTA GTAAACCAAG ACCTTTTAAC TkCTCGGTTA 600  
 10 GAGAATTCCA TGTATTTTGA GCATCTAGCT TTTTGTTAAA GTCAyCGTAG ACATTTTCCT 660  
 TAGTTAAATC AATTTGTTTT AATCCTTTAA AGTCTATAGA TTGTGTTAGA TGGCCTCCAT 720  
 CATCATTTCC AGGAGCAGAA ACGCTGCTAG AATATCCATT GCTTAATAAA TAAGTAACGT 780  
 15 TGATTGTTTC GACTCGTTA CTTAAAATAA TATCAGAATC ATGTAAGaAT CTTTAACTTT 840  
 TTTCCATAAT TGACCATCTG TCATTTTTTC TTCTGCTTTA GCCGTTTTAA CAACTTTATT 900  
 20 TGTATCTAAT CCTAAGTATG AAGAATGTAA GCCTGTTCCCT AATGTTGTTA ATACTAAAGC 960  
 ACTTGCTACT aATGTTTTAC CTAAAAAttT TGTATTCATT TTTATTGCTC CTTtTTTTAT 1020  
 ATTGTAAACG TTTACAATGA AAATATAATA ATAATTTTTT AAAAGAACAA TTAATAAAT 1080  
 25 ATCAAAAATG TATTAATACT CTATTAATAA AAAAATAGAA TAATTTTTTA ACATAGTTTT 1140  
 GTTGTTTTGA ATTATAAAAA CTAAAG 1166

(2) INFORMATION FOR SEQ ID NO: 689:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1083 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 689:

40 AGCACTGAAG GATGGCTAGT TGTCATAGCA TATGCGGTCA TTGGTATAGT TATAACGAGC 60  
 GTTCTTATA TGTGTCTAT TAAAATTTTT AACAAACAAG AACTAkAATT GTCGATTTTG 120  
 GTGATGATAG TATTTGAAAT AATATTTAGA GCAGGTGATA AATCTTTACG ATTGTCATCT 180  
 45 GTTCTTTTkg GTGTGGAATG AAATGTGGGG GATAAGTATA GGTGACATAT CTATATTGAT 240  
 TTATTTGTTT TGAGGTGGTT ATGTTGTGTG GGAATTATTT CCTTTTAGAT AGCGGGGATT 300  
 AGAGGATATA TGTTATTTAT AAGTATCATT TGATGATTGT ATAGGCTAAC GATTTCCCTCG 360  
 50 GAAATATTTA AAAACCTCGA TCATGTAGCA TAACTGAAGT TTGTCACAAA AGTATAATGT 420  
 GAAGTTCGAC ACTTTTGgaT TCAGTTCAAA TACTTTGACC GAGGTAAATA CTATTTATTC 480

TGATACTGAG ATAATCATTa CATGGTCGTG ACCTTTAAAT AAAAGGCTGA CAATATAAGA 600  
 CATAACGAGT ATACCTAGTG AATATGAAAT ATACTTCGCG TTTGTCAGTT CATTATGGAA 660  
 5 ATAAGGCGTG ATTAACCATA ATCCAATATA GAATATTAAA AACTGATAT ACATCATATT 720  
 AATTTCAAAC AAGTCATTTa GTTTATTGTT ATTACTAAAA ACAATTGCAG CATTAAATCAC 780  
 ACCTAAAGCG ATATTGATTA ATAGATGCGT ATACGATAAA CGGAAACCGA TAGATGTTAA 840  
 10 TTTATGATTA ATATAATTTT CAGTAATGAT CCAATATACA CCGAAAAGAC TAATTAAAA 900  
 CATAAATTGG AATATATAAA TGTAATAAA ATGATCAATG CTAAATGATG ACGAAGCTAA 960  
 15 ACCAACCAGT ACCTCGCCAr AGwTAtAATT GTTAGTAACG AAAAACGTCT ACTAAATGCA 1020  
 TCATATTAAC AGGTnTAATA CAAGTATTTc TGAAATGGAA TAAGnCTGTC GCTGCATGAT 1080  
 ACG 1083

20 (2) INFORMATION FOR SEQ ID NO: 690:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 627 base pairs  
 (B) TYPE: nucleic acid  
 25 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 690:

TTAATCATCT GGATGTATTT AGTATTnAGA ATAATAAnAA AACGATCATG TTGTATtTGA 60  
 GTAGCGATTG GTTTGCGGAA TTAGGCTTTA CTTTCTTTAA TTACCACTAT ACAGCAAAGT 120  
 35 TGATTAAATC ATCCTATAAT TTGAAATGTC TACTATTAAA ATTGACATAT CGATACCTTG 180  
 ATAATCAGCC TCTTAATGAC GCTGATayTA GAAAATTACA GGATATTATT AAAATCATTG 240  
 CAAAAGAAGC AAGTATGGAT AAAAAGATTG CACAAAATCA ATATCGATAT GCGTATTATG 300  
 40 GTGATTTGCG TGATGAGCTC GAATATATTT ATCAAAATGT AAATCAACGA TTGACATTAA 360  
 AAAGTGTCGC TGATAAATTA TTTGTCTCAA AGTCAAATTT GTCATCACAA TTCCACTTAC 420  
 TTATGGGCAT GGGTTTTAAA AAATATATTG ATACTTTGAA AATnGGTAAA TCGATTGAAA 480  
 45 TTCTACTTAC TACTGATAGT ACTATTAGCA ACATAAGTGA nCATTTAGGT TTTAGTAGTA 540  
 GCTCCACTTA CTCTAAAATG TTTAAAAGTT ATATGGATAT CACACCGAAT GAATATCGTA 600  
 50 ATTTATCAAA ATATAATAAn TGTTTAC 627

(2) INFORMATION FOR SEQ ID NO: 691:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 641 base pairs

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(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 691:

|    |                                                                    |     |
|----|--------------------------------------------------------------------|-----|
|    | TTGAACGTAA TGCTAGCAAA TGACTTTGTG CCATAAAATA TTCTTCCCAT TTGATTCTTT  | 60  |
| 10 | CCAAGATGTT CACCTTCCAT ACTTAAAATT TAGTAACATT TTCTAATAAT ATAAGATTAA  | 120 |
|    | TCACAAAAAA TAAAATTGTC AATTAAAATA ATCCATTATG TCGTGAAATA AGATTTTCAGT | 180 |
|    | TTATCAAAAG TTTTACTTCC AAAACCTTTT ACTTTTTTCA AATCGTCAAT TTCTTGAAAT  | 240 |
| 15 | GCACCTTGTT GGTGCGATA TTCAACAATT GCATTAGCTT TAGCTTGCCC AACTCCAGGA   | 300 |
|    | ACAGACATCA ATTCTGATAC AGATGCCGTA TTTAAATTTA CTTTAGTATT ATTGTGTTC   | 360 |
|    | CCaTTTTTTT CGTGCACT GTTACTTCA ATTTGTGGTT CAACATTCTT TTGTCCTTTA     | 420 |
| 20 | TGAGGTATGA AAATCATTTT TTGATCTGTT AATTTTTCAG ACAAATTAAT TTGACTTACA  | 480 |
|    | TCTGCATCCT CCAATAATTG TGCTTTATCA AGTAAATCAA CTAATCTATC CTTAGATGTC  | 540 |
|    | ATTTTATAAA CATTAGGATG TTTAACAGCA CCTTTTACAT CGACATATAC AGGACCCCTTA | 600 |
| 25 | TTTTTGGAAT TATCTCCATC TTGACCTGG ACATCTTCTA C                       | 641 |

(2) INFORMATION FOR SEQ ID NO: 692:

|    |                               |
|----|-------------------------------|
| 30 | (i) SEQUENCE CHARACTERISTICS: |
|    | (A) LENGTH: 631 base pairs    |
|    | (B) TYPE: nucleic acid        |
|    | (C) STRANDEDNESS: double      |
|    | (D) TOPOLOGY: linear          |

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 692:

|    |                                                                     |     |
|----|---------------------------------------------------------------------|-----|
|    | TATTAAAGnA CTTGATGAAC CAAATCATAA AAAGChATAT ATGTTATTTG CAGCTGGCAT   | 60  |
| 40 | TGTGTTnGCA ACTATTTTAC TTATTTTCGGC ACATTTTATAC AGCAGAAAGA GAGGTAACCA | 120 |
|    | AGTTTGAGAA TCATAAAGTA TTTAACCATT TTAGTGATAA GCGTCGTTAT CTTAACCAGC   | 180 |
|    | TGTCAATCTT CCAGTTCTCA AGAATCAACT AAATCCGGCG AATTCAGAAT CGTACCAACA   | 240 |
| 45 | ACTGTTGCAT TGACAATGAC ATTGGACAAA TTGGATTTAC CAATTGTCGG CAAACCCACG   | 300 |
|    | TCATATAAGA CATTGCCTAA TCGTTATAAA GATGTACCGG AAATTGGTCA ACCAATGGAG   | 360 |
| 50 | CCGAATGTTG AAGCTGTAA AAAGTTAAAA CCAACACATG TTTTGAGTGT GTCAACGATT    | 420 |
|    | AAAGATGAAA TGCAACCATT TTACAAACAA TTAAATATGA AAGGCTACTT TTATGATTTT   | 480 |
|    | GATAGTTTAA AAGGGATGCA AAAGTCGATT ACACAATTAG GTGatCAATT TAATCGTAAA   | 540 |

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GCAGCTAAAC AAAAGAAACA TCCCAAAGTA T

631

(2) INFORMATION FOR SEQ ID NO: 693:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1111 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 693:

|        |         |          |        |         |        |        |        |        |        |        |        |         |     |
|--------|---------|----------|--------|---------|--------|--------|--------|--------|--------|--------|--------|---------|-----|
| AATTTA | ACTA    | TGTTTT   | CCAC   | ATTGTTT | TCAT   | GTCACG | AAAA   | GGACA  | ACGCG  | CGACT  | TATA   | AG      | 60  |
| TATCA  | ACTAT   | TTCCAC   | AAGT   | TTTATT  | GGTG   | TTTTT  | TATT   | TCAT   | CGAT   | AC     | GCTT   | CATTTT  | 120 |
| CATCT  | CTCCA   | ACACAAAA | GAAG   | CTAAG   | CACT   | TATG   | TT     | GCCT   | AACT   | CC     | TCTAT  | ACTAT   | 180 |
| CCATAT | TTTTA   | CTATTAT  | CCA    | TATTT   | CATT   | G      | AATTAT | CTAA   | TGTT   | GGCT   | T      | TATTTTT | 240 |
| ATATTT | CTAC    | CGTCA    | ATGAC  | GTCAC   | TCTG   | CGATT  | TGTTT  | GTAAT  | TTTTTT | ATT    | AAGT   | TTCA    | 300 |
| AACGT  | AATA    | AGCCG    | CCATC  | TTTC    | ATTAT  | C      | ACTTTT | TATCT  | TACT   | ATCT   | TT     | AGGAA   | 360 |
| TTTAT  | ACAG    | AT       | CAAAAT | TTTG    | AATT   | AAAT   | AC     | TGTCT  | CAATT  | TAAAG  | TCGAG  | TTCTTT  | 420 |
| GAAAT  | CTCT    | TTTATA   | AAAT   | G       | TAGT   | GTACT  | CTAC   | CGT    | ACG    | TAGCA  | ATACC  | GTCAC   | 480 |
| TCTCT  | CTTGA   | TTTG     | AAATCT | TGGT    | GCGTTT | ATATA  | ATCAT  | AATA   | AGCG   | T      | TTGATT | TTTTC   | 540 |
| TTAGT  | GACAC   | CACCAT   | ATGA   | AAAC    | ACTGT  | G      | CCATT  | ACGGT  | TTTCC  | GCTT   | C      | TTTAACA | 600 |
| AATAT  | GTCTA   | ATCCCG   | GATT   | TTTAC   | GTGCT  | TTAA   | ATCTTT | CAAT   | ATCT   | TT     | ACCAA  | ATATC   | 660 |
| TGTACT | CTTG    | TGAAT    | TTTTCT | ATTTTT  | TATCA  | AAGATA | AAGT   | AATG   | CTTG   | CC     | ACCTTT | GTCTA   | 720 |
| TAACG  | ATAAC   | CAGTAA   | CATT   | TTTAA   | GTTC   | TTACT  | TGCGC  | CACT   | ATAG   | T      | ATCTCT | TAAG    | 780 |
| TCAA   | AGATAT  | CTTTT    | GTGCAC | ATTTT   | CATAT  | TTTG   | CTTTAT | GTTCA  | CTCG   | C      | ATTTAC | AGTT    | 840 |
| TGATG  | CAATG   | ACGTT    | ATTGT  | TCCT    | GTTGCT | AAAAT  | ACCTA  | ATGCT  | AAACT  | TGCTTT | CGCA   |         | 900 |
| ATTG   | CTGTCA  | TTTT     | CATAGT | TGTAT   | GCTCC  | ATTCG  | TAATT  | ATTAG  | ATTTG  | TTCG   | CTTACG |         | 960 |
| TCTAT  | TGAAT   | CATAC    | AGCTT  | TATTAT  | AGTT   | AGCG   | TATTTG | ACCTTT | CACA   | TTAA   | ACCATG | 1020    |     |
| TTTA   | ATAATC  | ATTGA    | ATCAT  | TATTA   | AGTAA  | ATTA   | AGGATC | TATA   | ATGTTC | GTTAA  | ATAAAA | 1080    |     |
| CTGA   | nCCCCGT | TGTG     | CTTCAC | ACCCG   | nTnGA  | T      |        |        |        |        |        | 1111    |     |

(2) INFORMATION FOR SEQ ID NO: 694:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 426 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 694:

```

5  TTATGGATGG ATTAAGAGGT CGTGTGAAA AAATCAACGA TAACTCTGTT ATTGTTGACT      60
   TAACAATTAT GGAATAATTT AATGACCTTG ATTTACCGGA AAAAAGTGT ATCAATCATA      120
   AACGATATAA GATTGTTGAA TAAGAAGGTA AGTTATAATG AATAAAATCT CGAAGGCTTT      180
10  AACTTGGTTT ATTATAAGTT TCATTATATT TCATCTCATA TTATTTATTA TGTGGGGCGA      240
   ACACCAAGAA TACTGGTATT TATATACAGG TATAATGCTA ATTGCTGGTA TCAGTTATGT      300
   ATTTTATCAA AGAGATATTG AATCTAAGCG GTTGCTTACA TCAATTGGTG TTGGTATTAT      360
15  TACGGCAATT ATTTTAATTA TGCTTCAACT TTTATkCTCA CTTATAACTT CTAATTTAAG      420
   TTATAG                                     426

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20 (2) INFORMATION FOR SEQ ID NO: 695:

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   (i) SEQUENCE CHARACTERISTICS:
       (A) LENGTH: 737 base pairs
       (B) TYPE: nucleic acid
       (C) STRANDEDNESS: double
25  (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 695:

```

30  AAAAGGGGnG TAAGGTTTAG CTCAAGTACG AGAAGTCTTT GGTGATGAAG CAATTGATGA      60
   AAATGGTGAG ATGAATCGTC GTTATATGGG TGATCTAGTG TTTAATCATC CAGAAAAACG      120
   CTTAGAATTA AATGCTATCA TACATCCTAT CGTGCGAGAT ATTATGGAAG AAGAAAAGCA      180
35  AGAATATTTA AAACAAGGAT ATAATGTAAT CATGGATATT CCATTATTAT TTGAAAATGA      240
   ATTGAAAAT GCAGTAGACG AaGTGTGGGT TGTATACACT TCTGAAAGTA TACAAATGGA      300
   TCGTTTAAATG CAACGTAATA ATTTGTCATT AGAAGATGCG AAAGCACGTG TCTATAGCCA      360
   AATTTCTATT GATAAAAAAA GCCGAATGGC CGATCATGTT ATCGATAATT TAGGGGATAA      420
   ACTTGAATTA AAACAAAACC TTGAGAGATT GTTAGAAGAA GAAGGTTATA TTGAAAaGCC      480
45  GAATTACGGA GAAGAAGATT AATATTACAC TATAAATAAG TCATTACTTT ACGTACGCGT      540
   TGATGTATGT AAGTAATGAC TATTTTTTAT AAAAAAGATA AATAAATCAA CGGAAAACGC      600
   TTTCAAATTT CATATAATAT GCTATACTAA TTCCATAAAG TATAACACAT AAAGATCAAG      660
50  GGGTGCTTTT AATGTCAACG AATATTGCAA TTAATGGTAT GGGTAGAATT GGAAGAATGG      720
   TATTACGTAT TGCATTA                                     737

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- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 432 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 696:

```

10 AACGATAAGA ACAAAGATA TATTACAAAG CGTTTATTTA AAACGTTATT TATTACGCGC      60
   GATGATGGCA GGATTATTAT TCGGGATTAT TACGGTCTTC GTATTATCAG TTAAAGCAAC      120
15 ACACGAACCA GATTTACCGC CAGgCATTGT GAATATGGCC AGTGCCATTA CATTCAGCTT      180
   TCGGTTAGTA CTCATTTTAT TTACAACTC CGAACTACTA ACCAGTAACT TCATGTACTT      240
   TACTGTAGGC CTGTATTmTA AAGTAATTAA ACCAACTAGA GTATTGaAAA TATTTTTATT      300
20 ATGCTTTGCA GGAAATATTT TAGGTGCTGC TATTiyATTT AGTTTCATGC GTTTTTCAAA      360
   TGTAATGACG CCAGATAwGt TAAAyCAGTT ATCAGCAGTT ATAGAGCATA AAACGTTGTC      420
   TACTGGTTTT GT                                     432

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(2) INFORMATION FOR SEQ ID NO: 697:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 782 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 697:

```

35 CTTTTATACG AAAGTTAAaA TCAATATAA CATTAATGTT TGATGGGGAT TTTGCGGGTA      60
   GTGAmGCAAC ACTTAAAACA GGTCAAAATT TGTTACAGCA AGGGCTAAAT GTATTTGTTA      120
40 TACAATTGCC ATCAGGCATG GATCCGGATG AATACATTGG TAAGTATGGC AACGATGCAT      180
   TTAATGCCTT TGTAaaaaAT GACAAAAAGT CATTTGCACA TTATAAAGTG AGTATATTAA      240
   AAGATGAAAT TGCACATAAT GACCTTTCAT ATGAACGTTA TTTGAAAGAA CTAAGTCATG      300
45 ATATTTTCGCT TATGAAATCA TCGATTTTGC AACAAAAGGC TTTAAATGAT GTTGCACCAT      360
   TTTTCAATGT TAGTCCTGAG CAATTAGCTA ACGAAATACA ATTCAATCAA GCACCAGCCA      420
   ATTATTATCC AGAAGATGAG TATGGCGGTT ACATTGAACC TGAGCCAATT GGTATGGCAC      480
50 AATTTGACAA TTTGAGCCGT CAAGAAAAAG CGGACnAGCA TTTTAAAAAC ATTTAATGAG      540
   AGATAAAGAT ACATTTTTTAA ATTATTATGA AAGTGTGAT AAGGATAAET TCACAAATCA      600

```

TATCAGTGAT GCTGTGCAGT ATGTTAATTC AAATGAGTTG AGAGAAACAC TAATTAGCTT 720  
 AGAACAAATAT AATTTGAATG ACGAACCATA TGAAAATGAA ATTGATGATT ATGTCAATGT 780  
 5 TA 782

(2) INFORMATION FOR SEQ ID NO: 698:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 714 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 698:

AAATCATTGG CAAAATATAC GAATTGCATT TAAATCGTCA ATTTACATAT ATTTTTCGCT 60  
 20 AGTAATCAAT CGTTATCATT GTTATTTATC GTTACATTAT TTCGAGTATC AGTATGTATT 120  
 TCGGGCTTCG TTTGATAACG ACATTTCTTT GTGACATCGC TTCATCAGTG TAACAACAAA 180  
 TACAATGATT TCGTGATGTT AGTTACCCAT TTTATGTGTT GCATAAAATA TGTGTGTATA 240  
 25 AAACATTTTA AATCATTTTA TATAAACAAAT CTATATATTT TTGGCATTTC CAAAATATCA 300  
 CTTGTTATAT TAAAAACCGA CAAGACATTT TATCTTATCG GTTGAAATTT GTTATTGTTA 360  
 TTTGTAATGT TTTTAGGTTT CTTTTTAATA TAATATATTT CAGTGAAAAT ACATGATTGA 420  
 30 TTGTGATTTC ACTGAAACAT GGTTAATTGC GTTGTGTATG AATAACTTTA GCATAAATAT 480  
 AGGAAGTTAT TTTGTACATC GCCATATATA GAAACGAAAT TATAATGACA GCTAGTACGT 540  
 AACTTGTTAA AAATATATGA TGGTTATTAA TACCTATCAT ATTTAGTAAC GTATATACAA 600  
 35 TGTTACTAGA AATTAATGTG TGAATCAGTG CTA CTGTTAT TGGTATtGCG AACAAGAAAG 660  
 TCATTTGATT TCGTGTTATC TTTGCTATTC TTCCATTATC TAAACCAAGT TTTT 714

40 (2) INFORMATION FOR SEQ ID NO: 699:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 361 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 699:

50 ACTGAGAGCA ATAATTTAGT AACTTCTACT CAAGGAATTA TTAAAGAAGC ATTGCATAAA 60  
 TTGGGATTTG nnTTTAATTA AAGAACCTTT AAGAATGTTA CAAGTGCCTA TCCCTGTACG 120

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TGGACCAACA AAAGGGGGCG TCGTTTCCA CCCAGATGTT GATGAAGAAG AAGTAAAAGC 240  
 ATTATCAATG TGGATGACTT TGAAATGTGG CATTGTGAAA CTTACCATAC GGTGGTGGTT 300  
 5 AAGGGTGGTG ATCGTTTGTG GATCCACGTC AAAnGAGCAT TCCATGAAGT TGGAACGTTT 360  
 A 361

## (2) INFORMATION FOR SEQ ID NO: 700:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 943 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 700:

20 GTCCTTAATT GGTATCCACC TTTAGCACCG CGTACACTTC GAATTAACCC CGCATTCTT 60  
 AAAGGACCTA CAAGCTGTTC TAAATATAAA TCACTCAAAT TATTTTCTTC AGCAATTGAC 120  
 TTTAATGATA TACATCCTTG CCCCTCTTTT TTAGCAAGAG AAATCATCAA TGTAAGTCCA 180  
 25 TATCTCCCTT TAGTAGAAAT TTTCAATGTA TAACCTCACT TAATTCGAAT ATTGATATTC 240  
 CCATTTTAGC ATTTTTTGAG TTAAGATAGT ATAAGAAAGG TGTGACAAAT GTGAGTACAG 300  
 AACCATTAGC ATCGAGAATG CGCCCAAAAA ATATAGATGA AATCATTTCC CAACAACATT 360  
 30 TAGTTGGACC AAGAGGCATT ATCAGAAGAA TGGTTGATAC AAAAAAATTA ACTTCAATGA 420  
 TTTTATATGG TCCACCTGGT ATAGGCAAAA CAAGTATTGC CAAAGCAATT TCGGGCAGTA 480  
 CGCAATATAA ATTCAGACAA TTGAATGCTG TAACTAACAC TAAAAAAGAT ATGCAACTTG 540  
 35 TTGTTGAAGA AGCTAAAATG TCTGGTCAAG TTATCTTGTT ATTAGATGAA ATACATCGAC 600  
 TAGATAAAGC TAAACAAGAC TTTTATTAC CTCATTTAGA AAATGGCAAA ATCGTCTTGA 660  
 TCGGTGCTAC AACTTCAAAT CCTTATCATG CTATCAATCC AGCGATTCGT TCAAGAGCGC 720  
 40 AAATTTTCGA GTTATATCCT TTAAATGACG AaGATGTGCG CCAAGCGTTA ACTCGTGCAA 780  
 TAGAAGATGA TGAGAATGGT TTGAAmCAT ATCaACCCAA AATTGATGAA GATGCCATGA 840  
 45 CCTACTTTTC TACACAAAGC CAAGGTGATG TTCGTAGTGC GTTAAATGCA TTGGAATTAG 900  
 CTGTATTAAG CGCAGATAAT GACAAAGACG GTTATCGACA TGT 943

## (2) INFORMATION FOR SEQ ID NO: 701:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 445 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 701:

5 CATTAAGTGA AGTTGTTGAT ACACCCATGC ATCAAGTCAA TTGTTCTGTT GATTTAGATA 60  
 CAGAAAGCTT ATTAGGCTTT AAAACAATTA AAACAAATGC GGAAGGTCAA CAAGAAATTG 120  
 TCTTTGTAGA TGGTCCAGTT ATTAAAGCTA TGAAAGAGGG GCATATTTTA TATATTGATG 180  
 10 AAATAAATAT GGCTAAACCT GAAACATTGC CTGTATTAAA TGGGGTCTTA GATTATCGTC 240  
 GTCAAATTAC GAATCCATAC ACTGGTGAAG TAATCAAAGC TGTACCAGGA TTTAACGTTA 300  
 TAGCAGCGAT AAATGAAGGT TATGTTGGtA CTTTGCCAAT GAATGAAGCA CTAaaaaaAaT 360  
 15 CGCyTTGTTG TtAtTCACGT kGATTATaTT GATGGGGaCA TTTAAAAAAT GTGAnTAAGG 420  
 AGCAAGGTTT ATTACAAGAT GTTAA 445

## (2) INFORMATION FOR SEQ ID NO: 702:

20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 752 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 702:

30 TGCAAGATAA ACAAAATTTGT CATTGTTTTG GTTGTAaaaa AGGTGGCAAT GTTTTTCAAT 60  
 TTACTCAAGA AATTAAAGAC ATATCATTTG TTGAAGCGGT TAAAGAATTA GGTGATAGAs 120  
 TTAATGTTGC TGTAATATTT GAGGCAACAC AATCTAACTC AAATGTTCAA ATTGCTTckG 180  
 35 AyGATTTACA AATGATTGAA ATGCATGAGT TAATACAAGA ATTTTATTAT TACGCTTTAA 240  
 CAAAGACAGT CGAAGGCGAA CAAGCATTAA CGTACTTACA AGAACGTGGT TTTACAGATG 300  
 CGCTTATTAA AGAGCGAGGC ATTGGCTTTG CACCCGATAG CTCACATTTT TGTCATGATT 360  
 40 TTCTTCAAAA AAAGGGTTAC GATATTGAAT TAGCATATGA AGCCGGATTA TTATCACGTA 420  
 ACGAAGAAAA TTTCAGTTAT TACGATAGAT TTCGAAATCG TATTATGTTT CCTTTGAAAA 480  
 ATGCGCAAGG AAGAATTGTT GGATATTCAG GTCGAACATA TACCGGTCAA GAACCAAAAT 540  
 45 ACTTAAATAG TCCTGAAACA CCTATCTTTC AAAAAAGAAA GTTGTTATAC AACTTAGATA 600  
 AAGCGCGTAA ATCAATTAGA AAATTAGATG AAATCGTaTT ACTAGAAGGT TTTATGGATG 660  
 TTATAAAATC TGATACTGCT GGCTTGAAAA ACgTTGTTGC AACAATGGGT ACACAGTTGT 720  
 50 CAGATGAACA TATTACTTTT ATACGAAAGT TA 752

55

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 830 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 703:

```

10  nCGTTTTTGT nAAACnGCTT ATATGTATAA CTTTTCCCA TTTATCATAA GTTTTGATAG      60
    AAGGAGTTGG ATCGCTAAAG AAAATATCTC TAAAGATATC ATCTTCAATG ATAGGAATAT      120
    TATGTCcTTC GcATAAGTA ATTATATTTT TCTTTTGCTC ATTCGTtAAA GAACGACCTG      180
15  TCGGGTTATT AAACCTAGGT TCTATATAAA TCGCTTTATT TTTAAAATTA ATAAATCTAT      240
    CAATGATGGT ATCAATTTCA TTAATTTGAT TATAAGGAAC ATCAATATGT CTAAAATTCA      300
    ATTGCTCAAA AACATTTGTA GAGTGAATAT ATGATGGTGT ATTCGAAATT ATTATGGCAT      360
20  CTTGACCTAA AAACCCAATA GATAAAAGTT GAATGGCATG TAAAGCGCCT GAAGTGATCA      420
    TTACATTTTC TCTACCTACA TTTATACCTT GCTTTGACAT TCGTTCAACG ATAATATCTC      480
    TTAAC TTGAT ATAACCATAG CCATTATTAT AACCAAAAGA TAAGTCTTCA ATATGACTGG      540
25  CTGTATTAGA CATGGCTTTT TTCAATTGAA TATGTGGCAT TAACGATATA CCAATTACAC      600
    CTTTACTTAT ATGTATATAC GAATCATCTG TCTCAATTTT ATTAATTAAT TGCACCGTAT      660
30  ACTGACTTCT TGTTGAGAG GACCATAACA TCATTTcAGA CCACTTATTT GTAATATGTG      720
    CTTcATTCAA ATAGTCATTA ACATATGkTC CACTACCTAC TTTAGTATAG ATAAATCCTT      780
    CAGCTTCTAA TAACTCAATA CTTTtAATAA TCGTTACTCT ATTTACGTTG      830

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(2) INFORMATION FOR SEQ ID NO: 704:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 659 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 704:

```

45  AGTGGTGT TG GAAAAGCTAT TATGAAATTA TTACGTGAAC AACAAAGTTTA ATAAAAAAG      60
    AGGGGTCAAA TATGAAAGGA TTAATTATTA TTGGCAGTGC ACAAGTGAAT TCACATACAA      120
50  GTGCACTAGC AAGATACTTA ACTGAGCATT TTA AACACA TGATATTGAA GCGGAAATAT      180
    TCGATTTAGC AGAAAAACCG TTAAATCAAT TAGATTTTTC AGGAACAACA CCGTCTATTG      240

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TATTAGGAAC GCCAAACTAT CATGGTTCAT ATTCTGGAAT ATTGAAAAAT GCATTAGATC 360  
 ATCTAAATAT GGATTATTTT AAAATGAAAC CTGTAGGCTT AATAGGAAAT AGTGGTGGTA 420  
 5 TTGTTAGTTC AGAGCCATTG TCACATTTAA GAGTAATCGT CAGAAGTTTA CTAGGCATTG 480  
 CTGTACCAAC TCAATAGCA ACACATGATT CTGATTTTGC TAAAAATGAA GATGGTTCAT 540  
 ATTACTTAAA TGATAGTGAA TTCCAATTAC GAGCAAGATT ATTTGTCGAT CAAATTGTAT 600  
 10 CTTTGTGAA TAATAGTCCA TATGAACATT TAAAATAATA TTAAnAAATA TGTAAATnT 659

(2) INFORMATION FOR SEQ ID NO: 705:

(i) SEQUENCE CHARACTERISTICS:  
 15 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 705:

nCACCATATA GTAAC TGGA CCAACTACAT TACCGTCTTT TAAAAAGATT TTTTATAGT 60  
 25 TATTATCAAC ACTATTAAAT ATTTCAATAC CTTTAATTTC TGCATTTTCT ACAATTTGAC 120  
 CAGCACTATA CAAGTCACAC CCAGAACTT TTAATGACGT AAATGTTGTT GATCCCTTGT 180  
 ATCCGTTTCTGTT TTCTTTATTT GTTAAATGAT CAGCTAATAC TTTACCTTGT TCATATAGTG 240  
 30 GTGCAACGAG TCCATAAACT TTGCCGTTAT GTCTGCACAT TCACCAACTG CATATACATT 300  
 GCTATCACTT GTTTGCATCA CATCATTGAC AACAAATACCA CGATTACATC TAGACCTGAT 360  
 CTGGGCACTC CTGGGAAGGC GGAACCACTG CATACAACTA 400

35

(2) INFORMATION FOR SEQ ID NO: 706:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 380 base pairs  
 40 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 706:

45

TTAAAAATAC AGCTACAGGT AATTTTAATG ATTTTTCATC AATATCAAAT TTGGGATTAT 60  
 GGTGTGGCGC TGTAATACCT TTAACCAGTC AGAAAGAATG CACCTGCTCG TACTTTCAAA 120  
 50 TAATGTGAAA AATCTTCTCC AATCATCATT AAATCTGATT CATTAAAGCG TACATGTAAG 180  
 TCATTTGTTG CTTCTTTAAT AACTTGATA TGCTTTCTCG TTTATTATGG ACAGGCAAAT 240

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GCTTAATCCA TTTTGTCCAT ACATGATTCT GTATATCTGA AATCGAAAGT TCTnACTGTA 360  
 CCTTTACAAA ATGCCTTGnn 380

5 (2) INFORMATION FOR SEQ ID NO: 707:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 10 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 707:

CAnAAAGGAT CAAAGTGATC GGTATAGTGA TAATTAGCTC CAAAGAAAGA ATATTCTAAA 60  
 TCAAATCCAT ACCAAGCAGA AAGTATTAGC GAATATCAAT TTAAATGGTA CCGATTCAAA 120  
 20 TAAAGAAACA CGACATATAG AATTTTACT TGATGATTTT AGTGAATCAT ATGAACCAGG 180  
 AGATTGTATA GTAGCATTAC CGCAAAACGA CCCTGAATTG GTTGAAAAAC TAATATCCAT 240  
 GTTAGGTTGG GATCCGCAAT CTCCGGTGCC AATTAATGAT CATGGTGATA CAGTTCCTAT 300  
 25 TGTGAAGCA CTAACATCAC ATTTTGAATT TACTAAATTA ACATTGCCAT TATTGAAAAA 360  
 TGCAGATATC TATTTTGACA ATGAAGAATT ATCTGAnCGT 400

30 (2) INFORMATION FOR SEQ ID NO: 708:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 447 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 708:

40 TAATGCTGGT ACGGGTCATG CAGCATTATG TGAGTTGAAC TACACAGTTT TACAACCTGA 60  
 TGGTTCTATC GACATCGAAA AAGCGAAAGT GATTAACGAA GAGTTTGAGA TTTCAAAACA 120  
 ATTCTGGGGT CACTTAGTGA AAAGCGGTAG CATCGAGAAC CCAAGAGAAT TTATCAATCC 180  
 45 ATTACCACAC ATCAGTTATG TTAGAGGTAA AAACAATGTT AAATTCTTAA AAGATCGTTA 240  
 CGAAGCGATG AAAGCTTTCC CTATGTTCTGA TAATATCGAA TATACTGAAG ACATCGAAGT 300  
 AATGAAAAAA TGGATTCCAT TGATGATGAA AGGCCGTGAA GATAACCCTG GTATCATGGc 360  
 50 GGCAAGTAAA ATTGACGArG GTmCAGATGt AAmCTyCGGT GAATTAACAC GTAAAATGGC 420  
 TAAAAGCATT GAAGCACATC CAAATGC 447

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- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1448 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 709:

```

10 GTGTCTACCT GTTTTTGTTG TTCAATTGTT AACTTTTCTT TTTGAATAGT AGTATTTCGAT      60
   AATTCTTTAT CGCTTATAAA ATCATCTAGT GGATGGCTTT CTTTGAAACT TTTATTTTCA      120
15 GTCATCAATC ATCTCTCCAA TAGTTGCTAT TTTACATCAA TCTTGATGAT GTTTTTGATG      180
   TAACTTATTT AATTCCATTT CAATATCTAA ACGTTCATAA TCATCTTCGT TGAGACGCTT      240
   TAAATCAGCG ATTAATGTTT GTTTGACCTC ATCCAAAGTA ATTCGTGTTT GTTCTAAGTT      300
20 TTGCTGTTCA TTAATTGATT TTTTGGGCAT TTTTGCTAGA CGTGATATATG CATCAACCAA      360
   ATTTAAAGCA TTATCAATAT GAGAATAAAA AAAGCCTTCA ACTTTATAAA ATGATGCAGG      420
   TCTCTGTCTA ACTGTCGTAT AAATAGAACG TGAAATTTGG TATATATCAT TAATCTGCCT      480
25 AAAATCTTTA ATTGATCTTA TATTGACATA CGTTTTTAAA ATACCTCTAA GTTTTTGGTG      540
   TGTATGATTT AACTGATTTT GAATATAGCG ATAGTCTTTT CTAGTCAAAC CAATTTTCGTT      600
   TAAATATTTG CGTGAAGTGA GTTTTTGTAT CGGTAGGTAT GTCATTAAAA AGCCAACAAT      660
30 ACCAATAGAC ATATCAATTA AAAAAGATAC ATCAAGTGCA ATCATCCCAA ATATGCTTGT      720
   TAAAAACGCT ACAGGAATTC CCACTAACAC CCCAAATATA TGAGAAATAT TATATCTCAC      780
   TGTCATCTTC CTTTATTTAG CATTTTTATAT TGATCGAAAA TCCGATAATT TTTGATTTAG      840
35 TTCTAACTCT TCAAGTTGAT GGCTTGTTAC ATTTGATGCT GGTGAGGCAC CTTCAATTAC      900
   ACCTTGAATA AATCTCTCTA TATCTGCGTC ATCCCCTTGT GCATATATCT CTACATAGTC      960
40 ATCTACATTT TGAACAGTAC CGACAATGTT ATAGTTCATT GCAATGCGTT GTGTAAAATA      1020
   TCTAAATCCG ACGCCTTGAA CGCGTCCGAA TACTTGTAAT TGTATATGtC TCaTTTTTTAC      1080
   CACCTCATAA TGTTATTATA CGTAGTTTTA CTTAAAAAAA CTAATAATTA CTATAGTTAC      1140
45 TACTTTGTTT GTTTCAGTTC GTCAAAGTTG ATTTTCAGAG GATAAAGGTA TAAAAATAAG      1200
   TATAGAGTTT TTGAAGTATG GAAGGGGTCT TTAATAATGT GGACAGTTAC CAAAATTAGA      1260
   GCCGATTATG AGGGATGGTG GTTATTCACT GACTGGCCAG AAAACATTGT TGAAAAATAT      1320
50 CAATATCAAG ATTTTGATGA CATGTTTAAG CACTATCAAC AATTGATTAA TCAATGTAAA      1380
   GTTCAGTTCG ATAACATGT CACAGGCAAA TATAATATTT ATGCATTTTA TAATAATTGT      1440

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## (2) INFORMATION FOR SEQ ID NO: 710:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 710:

GCTGnAAAAT ATGTTAGAAG CAGATGCATG GGCAAAGCTG GGGTCCTTAT TTATTGTCAG 60  
 GTAAAGATGT CTTCAATTCA ACTATTGGAA TATATGGTAT GGGAGATATT GGTAAAGCTT 120  
 TTGCAAGAAG GTTGCAAGGG TTTAATACTA ATATTCTTTA TCATAATCGA TCAAGACATA 180  
 AAGATGCAGA GCGCGACTTT AATGCAACAT ATGTTTCTTT TGAAACGTTG TTAGCAGAAA 240  
 GTGATTTTAT CATCTGTACA GCGCCACTTA CAAAAGAAAC ACATCATAAA TTAAATGCTG 300  
 AAGCATTTGA ACAAATGAAA AATGATGCAA TTTTATTAA TATCGGTAGA GGACAAATTG 360  
 TAGATGAAAC AGCATTAATC GATGCACTAG ACAATAAGA AATTTTAGCA TGTGGTTTAG 420  
 ATGTATTAGC AAATGaACCG ATTGATCaTA CACATCCATT aATGGGacGT GaTAATGtTC 480  
 TGaTTaCACC aCACATTGGG TAGGCGCATT CAGTTAACh 519

## (2) INFORMATION FOR SEQ ID NO: 711:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1349 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 711:

CTATTACAGG TGGCGAACCA ATGTTTTCTA AAAAGTCTAT TAGAAATGTT GTTAAACCTC 60  
 TATTAAAGTA TGCACATCAT CGAGGTATAT ATACACAAAT GAATTCAAAC CTAACATTGC 120  
 CTCAAGATCG TTATTTAGAT ATTGCTGAAT ATATCGATGT TATGCATATC TCACACAACT 180  
 GGGGAACAAC TGATGAATTC GCAATGTTG GCTTTGGCGC AATGAAGAAG CAACCACCGT 240  
 TAAAAGCTAA GTTAAATTA TATGAACAAA TGATTTGAA TGCACGTACA TTATCAGAAC 300  
 AAGGAATGTT TGTATCTGCG GAAACAATGC TCAATCAAAG TACGCTACCA CATTTACGAA 360  
 AAATACATCA AGAAGTCGTT CATGATATGA AATGTAGCAG ACACGAGATT CACCCTATGT 420  
 ATCCAGCTGA CTTTGCAAGT CAATTAAATG TGTTAACTCT AGCGGAAATG AAAAAGACAA 480

TGTTCCTCATG CTTAAAGGAT GATGAAGATC AAAAGTTACT ATCACGTTTA AGAAATGCTA 600  
 AAAATGTAAC GACTAGAAAT GACCCGGATG GCCGTAGTCG TTAAATGTC AATGTATTTA 660  
 5 CAGGTAATGT AATCGTAACT GATTTCGGAG ATGAAACAGG TACAATTTCG AATATACAAA 720  
 AAGATAAATT AACAGATGTA TTTGATAAAT GGTATCCTC TGATCTTGCT AAATCATTAA 780  
 ATTGTCATTG TTCCGAGTTT AGTTGTTTAG GGCCAAATGT TCTTGTTAAA AATATGTACT 840  
 10 ATCCGAATAT GGATTTTAAA GATAATGAGC GTCATATGCA CAAACAACCA CAAATTATAC 900  
 AATTTTAAAA ACTCTTAATT ATGCGGAGAA GCACTTTATC GATAAGTAGT CTCCGCATAT 960  
 TTTAATGCTA TTATAAAATA AAAACAATT AATTGCTGGC AGTACTCTAC TTAAATAATA 1020  
 15 AAGGGCATT T AATAGGACTA ATAGTCTATA ATAAAGGGG TAAATTTTAA CTAAAAGCAT 1080  
 AAACGTGCAT AATCAAAAAG ACAGATTGTA GGTGGAATAT TCGAaCATAA CAGTTCAATT 1140  
 20 CATCCTTAAC AATCTGTCTT TATATTTTTA GTCTCTAATA TGTTGCACTT GAGCTAAATA 1200  
 TTCAATTGTT gTTTACTTtC AaTGCGaCgt GCTTtCtCtC GTtCaaCaCG TgwGGTGCTG 1260  
 TATCATAAAA CCATTTTTCa ACATCATCTT CTGGATATAC ACCAGGTACA TGTTTAGGTT 1320  
 25 GCCTTCATCA TCTAACGCAA CAAATGTAA 1349

(2) INFORMATION FOR SEQ ID NO: 712:

(i) SEQUENCE CHARACTERISTICS:  
 30 (A) LENGTH: 377 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 712:

GAAATTAAAA AAGCAATTGG ACAAGATGCA ACAGTGTCTAT TGTTTGATGA ATTTGATAAA 60  
 40 AAATTATACA CTTACGGCGA TAACTGGGGT CGTGGTGGAG AAGTATTATA TCAAGCATT T 120  
 GGTTTGAAAA TGCAACCAGA ACAACAAAAG TTAAGTCCA AAAnCAGGTh GGCCTGAATG 180  
 GAACCAGGAG GAAnTTGAAA ATATGCTGGG GATTACATTG TGAGTACAAG TGAAGGTAAA 240  
 45 CCTACACCAG GATACGAATC AACAAACATG TGGAAGAATT TGAAAGCTAC TAAAGAAGGA 300  
 CATATTGTTA AAGTTGATGC TGGTACATAC TGGTACAACG TCCTTATACA TTAGATTTCa 360  
 TCGGTAAAGA TTIAAAA 377

50 (2) INFORMATION FOR SEQ ID NO: 713:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 528 base pairs

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(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 713:

|    |                                                                    |     |
|----|--------------------------------------------------------------------|-----|
|    | AATGAAnCGA AAAATGACTA TAAAAAGTTT AAAGTGT TTT CACTTATTTT AACACTTGTC | 60  |
| 10 | ATTGTCATTT TAGCAATTAT AAGATTTGTT CATAAAATGA TGTAATTAGA GTGAGACATT  | 120 |
|    | GTTTTATGTC TCAGGATCCA GTTATTCATT ATATCTACAA TATTTACGAT TATATAAATA  | 180 |
|    | ACCCGAGATT TTAGTATGAT TCATTtCACT AAAATCTCGG GTTTCTATTT GATAATTTTT  | 240 |
| 15 | AATGGGATAT GGCATGTATA CGTTCTTGCC TTTTATCTCA TTTCCAATGA TTAATCTGGA  | 300 |
|    | TATTGTTCTA AAAATGCTTT CGCTTCTTTA TTAAGTGT TAAATCAAT ACCTTGTTGC     | 360 |
|    | ATCGCTGCAA AGACACATCC ACAATAACAC TGCCTAAAGA TATTATAGTC ATTACACATT  | 420 |
| 20 | TCTATGGaAC GCTCATAACC TTTACTTTTC yTAAATCAC TTGGcAAATA GTTCACaTCG   | 480 |
|    | TATATTTTTT GGACATCCAT ACCAAGTTCA TTGATTAATT GTGCGTTC               | 528 |

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(2) INFORMATION FOR SEQ ID NO: 714:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 731 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 714:

|    |                                                                    |     |
|----|--------------------------------------------------------------------|-----|
| 35 | TTTAATGGCA TGAAGTCACA GTATATAAAG AATCTGGTGT GACAATCAGT ATGACTAAGT  | 60  |
|    | ATATAAAAAA AGAGCAGGTG cGAAATAATG GCGAAAGAGT CGAAATCAGC TAATGAAATT  | 120 |
|    | TCACCTGAGC AAATTAACCA ATGGATTAAA GAACACCAAG AAAATAAGAA TACAGATGCA  | 180 |
| 40 | CAGGATAAGT TAGTTAAACA TTACCAAAAA CTAATTGAGT CATTGGCATA TAAATATTCT  | 240 |
|    | AAAGGACAAT CACATCACGA AGATTTAGTT CAAGTTGGTA TGGTTGGTTT AATAGGTGCC  | 300 |
|    | ATAAATAGAT TCGATATGTC CTTTGAACGG AAGTTTGAAG CCTTTT TAGT ACCTACTGTA | 360 |
| 45 | ATCGGTGAAA TCAAAAGATA TCTACGAGAT AAACTTGGG GTGTACATGT TCCGAGACGT   | 420 |
|    | ATTAAAGAAA TTGGGCCAAG AATCAAAAA GTGAGCGATG AACTAACCGC TGaATTaGaG   | 480 |
| 50 | cGTTcAcYTT CTATcAGTGA AATAGCTGAT CGATTAGAAG TCTCAGAAGA AGAAGTGTTA  | 540 |
|    | GAAGCAATGG AAATGGGACA AAGTTATAAT GCGTTAAGTG TTGATCATT CATTGAAGCT   | 600 |
|    | GATAAAGATG GTTCAACTGT TACGCTATTA GATATTATGG GGCAACAAGA TGACChTTAT  | 660 |

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CGAGAAATCA T

731

(2) INFORMATION FOR SEQ ID NO: 715:

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- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 830 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 715:

|    |                                                                   |     |
|----|-------------------------------------------------------------------|-----|
| 15 | TTTTAGrGGa AAGCGaATTA GtCaTATwCg CaGCAGATwG aATGATTGaA AAmGaAATTG | 60  |
|    | aTTCGATTCC AATTGTAAGA AAAAAAGATA ATCAAAAGTA TGAAGTAATT GGAAGAATT  | 120 |
|    | CCAAAACAAC AATAGCTAAG TTATTAGTAG CATTATATAA AGAATAGGTG AGAAGTAATG | 180 |
| 20 | GAAAAAATTA AAATTATCGT AGCTTCAGAT TCTATAGGTG AAACGGCAGA GTTAGTTGCT | 240 |
|    | AGGGCAGGTA TTTCACAATT CAATCCTAAG CAATGTAAAA ATGAATTATT AAGATATCCA | 300 |
|    | TATATTGAAT CTTTTGAAGA TGTGTATGAA GTGATTCAAG TTGCAAAAGA TACAAATGCT | 360 |
| 25 | ATCATTGTTT ATACACTTAT TAAACCTGAA ATGAAGCAAT ATATGAGTGA GAAAGTAGCA | 420 |
|    | GAATTCCAAT TGAAGTCTGT CGATATCATG GGGCCATTAA TGGATTTATT ATCTGCTTCG | 480 |
|    | GTTGAAGAAA AACCTTATAA TGAGCCAGGT ATCGTTCATA GATTAGATGA TGCATATTTT | 540 |
| 30 | AAGAAAATTG ATGCGATAGA GTTTGCAGTT AAATATGATG ATGGTAAAGA TCCTAAAGGA | 600 |
|    | TTACCTAAAG CTGATATTGT TTTACTTGGT ATTTGAGAA CTTCAAAGAC ACCATTATCT  | 660 |
|    | CAGTATTTAG CGCATAAGAG TTACAAAGTT ATGAATGTAC CGATTGTACC AGAAaGTGAC | 720 |
| 35 | ACCGCCAGAT GGCTTATATg GATATTAATC CAAAGAAATG TATCGCACTT AAAATAAGTG | 780 |
|    | AAGAnAAATT AAATCGCATT AGAnAAGAGC GACTAAACA ATTAnGACTA             | 830 |

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(2) INFORMATION FOR SEQ ID NO: 716:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1159 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 716:

|    |                                                                   |     |
|----|-------------------------------------------------------------------|-----|
| 50 | nGAAGAACAA GTTTAnCATC TAAATGCCCG TTAAAACTA CAACTACTTG ACGATGTTAA  | 60  |
|    | ATCAGTGTTT AAnTCTCAAA TGACGCAAAA TAGTGATTTT AATGAAGAAA AGAAAGTGTC | 120 |

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AGAACGTATA AAAAAATACT TTAATAAGCA ACTCACTGAG CAAATTGCAC CAATCGTTCA 240  
 ACAATTAGCA GATTTACATG TCATTATTAA TCCTCAGTTT AACTTTGAAT CAGCTAATAT 300  
 5 AGAGCAACCA TTATTGCACA TCGATTTCOA CGATATGCTA AATGCATTGC CTAAACAATT 360  
 AACAAAACGT AAAATTTTGA ATCCAAATGG GCAAAGAGAT ATACATGAAT CAATTGTGCA 420  
 AAGTACGTTA GGATTATTAC AACCACAAAT GGGATTATTG AGGCAACAGC TTGAATTATA 480  
 10 TGTAAAGCAA ATGGCTGTAG AAGCTGAATC GCAATTTGAA AGTTTGAAG CTAATATTCA 540  
 AACGCAAATA AACGATTAT TAGCATTTGA TTTAGATACA ACACCTATCA ATCAATTGAA 600  
 AGATAAACAT CAACAACCTGA AACTATTTTT ATATTAAGAA AGAAGGAACG TTTTAAATGC 660  
 15 CTAATAAAAT ATTACTTGTA GATGGTATGG CGCTATTATT TAGACATTTC TATGCTACAA 720  
 GTCTTCATAA ACAATTTATG TACAATTCAC AAGGTGAACC TACAAATGGA ATACAAGGAT 780  
 20 TTGTGCGTCA TATCTTTTCG GCAATACATG AAATACGCCC TACACATGTA GCTGTATGTT 840  
 GGGATATGGG ACAATCAACT TTTAGAAATG ATATGTTTGA tGGTTATAAG CAAAACGTT 900  
 CTGCAACCACC AGAAGAATTG ATACCACAAT TTGATTATGT TAAAGAAATT TCAGAGCAAT 960  
 25 TTGGCTTTGT AAATATTGGC GTTAAAAACT ATGAAGCGGA TGATGTTATA GGTACATTAG 1020  
 CACAACAATA TTCAACTGAT AACGATGTCT ATATTATTAC GGGCGACAAA GATTTACTGC 1080  
 AATGTATTAA TGACAATGTT GAAGTTGGCT AATTAAAAAA GGTTTAACAT TTATAATAGA 1140  
 30 TATnCATAC ATCGTTTTn 1159

(2) INFORMATION FOR SEQ ID NO: 717:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 574 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 717:

GATTTAATCA ATGCAGTTGC AGAGCAAGCT GATTTAATA AAAAGAAGC TGGTTCAGCA 60  
 45 GTAGATGCTG TATTCGAATC AATCCAAAAC TCACTTGCTA AAGGTGAAA AGTACAATTA 120  
 ATTGGTTTCG GTAACCTTGA GGTACGTGAA CGTGCTGCAC GTAAAGGTCG TAACCCTCAA 180  
 ACTGGTAAAG AAATTGATAT CCCAGCAAGT AAAGTTCCAG CATTCAAAGC TGGTAAAGCA 240  
 50 TTAAAAGATG CTGTAAAATA ATTTTACTTA AAAAGCCCTG AATAAGGGCT TTTTATTTTG 300  
 CTTTAAATAC TTACAACCTG TACATAAATT GTAATGTTCT TCTAAGTTTT TAATCTTTGG 360

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AACTACAAAA TATACATATG aATATTGaGa TTAATTGTTA GCGTTGaATT TACTTAAAAG 480  
 GTAACCATGT CTACTATAGT ATTTTACGTT ATTTAAAAAG ATGAATAATG TAAATGAAGT 540  
 5 AAAGGTTATT ATGAGAATTA CAAAAGCTAC ATAA 574

(2) INFORMATION FOR SEQ ID NO: 718:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 493 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 718:

AAGaTATTGA AAmTGMaATG GaGCACGCCC TTATTTGATA GAAGTAAAAG ACATTTAATT 60  
 20 CTTACCGATG CAGGTCAAAT TTTTATGAG AAAAGTAAAG AAATTGTTtGC ACTGTATGAT 120  
 TATTTACCAT CTGAAATGGA ACGCTTGAAT GGA CTGGAAA CAGGACATAT AAACATGGGC 180  
 ATGTCGGCAG TCATGAATAT GAAGATTCTT ATCAATATTC TTGGTGCATT CCATCAACAA 240  
 25 TATCCAAATG TTACATATAA TTTGATAGAA AATGGCGGTA AAACAATTGA ACAGCAAATT 300  
 ATCAATGATG AAGTAGATAT AGGCGTGACC ACTTTGCCAG TCGATCATCA TATTTTCGAT 360  
 TATACTACCC TAGATAAGGA AGATTTGCGA CTTATCGTGA GCAGAGAGCA TCGACTCGCA 420  
 30 AAATATGAAA CTGTTAAACT CGAAGATTTA GCAGGTGAAG ACTTCATTTT ATTTAATAAA 480  
 GACTTTTACT TGA 493

(2) INFORMATION FOR SEQ ID NO: 719:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1257 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 719:

45 GCATTGCCAA AACAATACGT TTATATTATT GAGGAACTAC TGTATAAAAG TAATGAATAT 60  
 CAAAATAAAA AATCATATTA CGAAACACTT GTTAACCAAG TAATTGAACT TAAACAGGCA 120  
 GATGATTTAA TTATTGGA CTGCTTATTC GTACAACGCT TAGTCGTCGA TCATTTACAC 180  
 50 GTTGTGGTG ATATTTATGA TCGTGGACCA CAACCAGATA AAATTATGGA TACTGTGATT 240  
 AATTATCATT CCCTAGATAT TCAATGGGGT AATCATGATG TGCTTTGGGT TGGAGCCTAT 300

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GATATTATCG AAGACGCTTA TGGCATTAAAT TTAAGACCAC TGCTTACTTT AGCTGAAAAA 420  
 TACTATGACG CAGATAATCC TGCTTTTAAG CCTAAAAAAA GACCTGACAA ACACGAACGT 480  
 5 TTAAGTCAAC GTGAAGAAAG TCAAATTACT AAAATTCATC AAGCTATTGC GATGATTCAA 540  
 TTCAAGTTAG AAATACCAAT TATTAAACGT CGTCCAAATT TCGAAATGGA AGAACGTCTT 600  
 GTGCTTGAAA AGGTTAATTA TGATACAAAT GAAATTACAG TTTATGGTAA TACATACCCA 660  
 10 TTGAAAGACA CATGTTTCCA AACTGTCAAT CGTGATAATC CAGCAGAATT ACTACCTGAA 720  
 GAAGAAGAAG TCATGAATAA ACTATTATTG TCATTCCAAC AATCTGAAAA ATTACGTCGT 780  
 CATATGTCTT TCTTGATGCG TAAAGGCTCT CTTTACTTAC CATATAATGG CAATTTACTC 840  
 15 ATTCATGGTT GTATTCCAGT TGATGAAAAAT GGTGAGATGG AATCATTTGA AATTGATGGT 900  
 CATACTTACA GCGGCCAAGA ATTATTAGAT GTGTTTGAGT ATCATGTCCG TAAATCATT 960  
 20 GATGAAAAAG AAAATACTGA TGACTTATCG ACGGATTTAG TTTGGTATTT ATGGACTGGG 1020  
 AAATATTCGT CACTATTTGG TAAACGTGCC ATGACTACGT TTGAGCGATA CTTTATTGCA 1080  
 GATAAAGCTT CTCATAAAGA AGAAAAGAAT CCGTACTATC aTCTTCGTGA AGATGTGaAT 1140  
 25 ATGgkTCGTA AAATGCTCaG TGaTTTCGGA TTAAATCCAG ATGAAGGACG CATTATTAAT 1200  
 GGTCAACAC CAGTGAAAGA AATCAATGGC GAGATCCTAT CAAGGCTGAT GGAAAGA 1257

(2) INFORMATION FOR SEQ ID NO: 720:

30 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 720:

40 TGAGCACATG ACAGTGGCTG AAAACATTAA ATTTTTTAAA TCACTTTGTA AAAATCCAAT 60  
 TAACGATACA ACTATCAACG AATATTTACA GCAATTAAAC TTTGATGATA CGTCTGCCAA 120  
 AGTATCTACA TTGTCCGGTG GGAATAAACG TAAATTAAT ATATTAGTAG GTTTACTAGG 180  
 45 TCAACCTCGA ATTCTCATTT TAGATGAACC GACAGTTGGT ATTGATTTAA AATCTAGACA 240  
 TGACATCCAC CAACTACTTA ACATCATGAA ATCTAAATGT TTAATTATAT TAACTACCCA 300  
 TCATTTAGAT GAAGTTGAGG CACTTGCAGA TGGTTATCAA GTTAATTGGG CCAGGTnCCC 360  
 50 TTTTnTTCAA CAGTTTTTGG GGGCCAACCA TGGGCTTATA 400

(2) INFORMATION FOR SEQ ID NO: 721:

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(A) LENGTH: 570 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 721:

10 CTTATTTATA TTATAATATA AATATTTTAT TTTTCAATAC TTAATTTTAA AAATCCCCTA 60  
 TGAAAATGTT GATGAGCTAC ATCTTTAAAT CTTATTATAC ATTGTATAAA ATTATATTGC 120  
 GAGGTAGTAA ATTGATATTA TACACTTTTG GTTGTGTATG CATCTCACCT ATCTTTTTTG 180  
 15 CTTTTTTCAA ATAAGAAAGT ATTAAAAATy AATGCCTATA CAGGAACAGA CATGGCTAAA 240  
 CTTGATTTAA ATAGTCTTGA CGACGAGCAC GTAAAATTAT TAATAAATGA ATTAAAAATAT 300  
 CCAGAACTC ATATCGATGT AAATGAATTA AAAACAATAG TTGCTAGTCG AATAAATGAA 360  
 20 AGGCAAGAAA TAATAAGTTT TAAGTTAGGA ATAAAGTACT TATTAACAAT AAAAGAGGG 420  
 AACATAGAAA AAGATAGGTT TTCAATTTCA ATCATTTTCA AAGATACCTA TCACACCCTA 480  
 GTTAGAATAG ATATTACGG TGTACTCAC GATAATCCAG ATGGAACAAT CGCTCCGAAA 540  
 25 AGTCATATTC ACATATATAA TGATAAGTAT 570

(2) INFORMATION FOR SEQ ID NO: 722:

30 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 722:

ATTTTAGTCT TAGGTGTTGA TTGCATGATG AATGCAGAAG TTATACCTGC AGCCATATTA 60  
 40 GCACCTTCAT TATTGTGTAT AATTTGAATA TTATTTGCTT TTAAAGTATG TCCAATTAAG 120  
 TTTGAAGTCG TTGTTTTACC ATTTGTTCCA CTGATAAATA CAATATCATC AACTTGCTCT 180  
 45 GCTAATTTTC TTAATATATC TGTATCCACT TTTCTAGCGA TTTGTCCAGG TAAATCTGTT 240  
 CCTCTTTTAC CTA CTGCTCT ACTTGCTTTA CGCGCCAATT TCGCTAGATG GATTGCCGTC 300  
 CACTGTCTCA TGTGTTTCCT CctCAAATt CCACTCGCAT CATTATAACA TGACAAGGCA 360  
 50 ACTTCAAAAA AGTTTCTCAA TCACAAATnG ATACCAGTGT 400

(2) INFORMATION FOR SEQ ID NO: 723:

55 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1113 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 723:

|    |                                                                    |      |
|----|--------------------------------------------------------------------|------|
|    | GATTATATGC TGTGGCAAA ACAATATACC CAGATGAATT TTTATTTTTA GTAATAGTAT   | 60   |
| 10 | AACCATGCTT TGTCTTACTA ACTTTGACAG CTCTAATGA ATTTGAAGCG TCTTTAAGCG   | 120  |
|    | TGGTATAATC TTCGCCGTAT ATCCCTTTTA AATTTACTCG ATACTTACCT TTAGGCAATG  | 180  |
|    | ATAATCTAAT TCTATCTGGA GCTTTAATGC GTATCGTTAC GGGTGTTACA ACGCGTCGAT  | 240  |
| 15 | ATTTATAAGT GAGTTTATTT CTTTCTGTG TATATTCATT CACTTTAACA TCATGAGCTT   | 300  |
|    | TATCCGGCGA AAGTAATTCT AAATCCATTT CAAAATACAA ATCTTTAAAT TGATTAGAAA  | 360  |
|    | CTGATTTTGG CAACTGTACA GTTAGACCAC CATTATTTTG TTAACTTGT AATAAATGTT   | 420  |
| 20 | TTGTAGGAGA TTGCCAGGCT GCACTATTTA ATTAAATTGT TGAATCTGAT AGTAAATTTT  | 480  |
|    | TATTGGCTTT AAAATGTGTA TTAACATCTT TAATATTGTT AGAAACAATC CCTTGCAACA  | 540  |
|    | TTGCTTGTC TTTATCTAAT GGAGATTTTA ATTCTTTATT GGAAAAGACC TTATTTGTAA   | 600  |
| 25 | TATGTGCACT TGGATAATGG ATGGTATTTT TAGAATGAAT CCAACGAACT TTATTGTCTT  | 660  |
|    | TGTGTTCA GA CTTAATTTTA AATCCATATG GtAAGTTGTC ATCATGATtC ACTCTAATTC | 720  |
| 30 | GATCATTAAC ATTCCAAAGT GATAGTaAT TTgACGATgC CAAGTAATCT ATAAGTGCTG   | 780  |
|    | TTTTTATCGA TTGCCATATT AATTTGGAGT GTCTTGTCAT AATATTTTAA AATGTCTCCA  | 840  |
|    | TTAAAAATAC TAGAATATAA TGAAATGCCA TTATAATGAT ATATAAATGG TGAATTTAAT  | 900  |
| 35 | GCATAGTCTG ACATATAATC AATGCGATTA AATGAGCCTG TTGCATTTTG ATTTATCTTT  | 960  |
|    | TTTATAAGCT GGTTTACATA GTTACTATGG TAATCATGTT GTTTCACGT TGATAATGAT   | 1020 |
|    | TGTTGATAAG GTTTGATTGC CATGTTTTTG TTGTTATCTA AAATGACGAT TTGTTGAATC  | 1080 |
| 40 | ATaACGATTA ATACTAATAT TGCAACGGTT AAT                               | 1113 |

(2) INFORMATION FOR SEQ ID NO: 724:

|    |                               |
|----|-------------------------------|
|    | (i) SEQUENCE CHARACTERISTICS: |
| 45 | (A) LENGTH: 464 base pairs    |
|    | (B) TYPE: nucleic acid        |
|    | (C) STRANDEDNESS: double      |
|    | (D) TOPOLOGY: linear          |

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 724:

|    |                                                                  |    |
|----|------------------------------------------------------------------|----|
|    | TGCCGTTTAG CAAAATCTAG TATCGCTTGA TGATCAGATT CTGAAATTC AGTGTGTACT | 60 |
| 55 |                                                                  |    |

GATTGATTAA GTTTATATGC AAGTGCATGT TCTCGTCCAC CAGCACCAAT TACTAATACA 180  
 TTCATTTATG TTACGCCCTT TTAATAATTAG TGTTTAAAAT GTCGAGTGCC TGTGACTACC 240  
 5 ATTGCAATAC CATGTTTATT AGCCATATCA ATTGAATCTT GATCTTTAAT CGAACCACCC 300  
 GGTGGATAA TTGCCTTTAT ACCATGTTGT GCTGCAAGTT CAACTGTATC TCCCATAGGG 360  
 AAAAATCCAT CAGATACTAA CGGCTACATG ATCATTGATT TCAATAGCTC TCTCTAACGC 420  
 10 AATTTTAGCA GCACCGACAC GATTCATTGG CCAGCAnCTA TACC 464

(2) INFORMATION FOR SEQ ID NO: 725:

(i) SEQUENCE CHARACTERISTICS:  
 15 (A) LENGTH: 1440 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 725:

GTTAAATnCA nTATTnAAA TaTATTACCT TATTAGAAAA AGTCGTAATA TGAGGTGTAC 60  
 25 AAATGACGCA AATTTTAATA GTAGAAGATG AACAAAAC'TT AGCAAGATTT CTTGAATTGG 120  
 AACTCACACA TGAAAATTAC AATGTGGACA CAGAGTATGA TGGACAAGAC GGTTTAGATA 180  
 AAGCGCTTAG CCATTACTAT GATTTAATCA TATTAGATTT AATGTTGCCG TCAATTAATG 240  
 30 GCTTAGAAAT TTGTCGCAAA ATTAGACAAC AACAACTCTAC ACCTATCATT ATAATTACAG 300  
 CGAAAAGTGA TACGTATGAC AAAGTTGCTG GGCTTGATTA CGGTGCAGAC GATTATATAG 360  
 TTAAGCCGTT TGATATTGAA GAACTTTTAG CAAGAATTCG TGCAATTTTA CGTCGTCAGC 420  
 35 CACAAAAGGA TATTATCGAT GTCAACGGTA TTACAATTGA TAAGAACGCT TTTAAAGTGA 480  
 CGGTAAATGG CGCAGAAATT GAaTTAACAA AAACAGAGTA TGATTTACTA TATCTTCTAG 540  
 40 CTGAAAATAA AAACCATGTT ATGCAACGGG AACAAATTTT AAATCATGTA TGGGGTTATA 600  
 ATAGTGAAGT AGAAACAAAT GTCGTAGATG TTTATATAAG rTATTTACGA AACAAGTTAA 660  
 AACCATACGA TCGTGACAAA ATGATTGAAA CAGTTCGTGG CGTTGGGTAT GTGATACGAT 720  
 45 GACAAAACGT AAATTGCGCA ATAAGTGGAT TATTGTTACC ACGATGATTA CGTTTGTAC 780  
 GATATTTTGT TTTTGTTTAA TTATTATTTT TTTCTTGAAA GATACACTGC ATAATAGTGA 840  
 GCTTGATGAT GcGaACGAA GCTCaAGCGA TATTAATAAt TTATTTCaTT CTAAGCCTGT 900  
 50 TAAgATATA TCTGCaTTAG ACTTGAATGC aTCTTTAgGT AAtTTTCaAG AGATAATTAT 960  
 TTATGATGAG CATAATAATA AATTATTTGA GACATCGAAT GATAACACAG TGAGAGTTGA 1020

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ATATTTAATT ATTAAAGAAC CAATTACAAC GCAAGATTTC AAAGGGTATA GCTTGTTAAT 1140  
 TCATTCACCTA GAAAATTATG ATAACATCGT AAAATCATTG TATATCATTG CGCTGGCATT 1200  
 5 TGGAGTGATT GCAACAATTA TAACTGCCAC AATCAGTTAT GTATTTTCAA CACAAATTAC 1260  
 TAAACCGCTT GTCAGTTTAT CAAATAAAAT GATTGAGATT CGACGAGATG GTTTTCAAAA 1320  
 TAAATTGCAA TTAAATACAA ATTATGAAGA AATAGATAAT TTAGCAAATA CGTTTAATGA 1380  
 10 GATGATGAGC CAAATTGAAG AATCATTTAA TCAACAAAGA CAATTTGTTG AAGATGCGTC 1440

(2) INFORMATION FOR SEQ ID NO: 726:

(i) SEQUENCE CHARACTERISTICS:  
 15 (A) LENGTH: 375 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 726:

TGATATTCCG ACTTGCAGAG ATTATTGCGC ATTAAGGATT AACGCAGTAT GAGTCCAAAG 60  
 25 ACGCGCGACA CCTGGAAAAA GGATTACCTA ATGCCTTATT TACAGTAACC TTGTATGATA 120  
 AAGATCGGTT AATTGGTATG GGTAGAGTGA TTGGCGATGG CGGAAGTGT TTTCAAATTG 180  
 TTGATATTGC AGTTTTGAAA AGTTACCAAG GTCAAGGTTA CGGCATCTAA TTATGGAGCA 240  
 30 TATTATGCAA TATATTAAAG GTGTGGCTGT TGAGAGTACA TACGTTATCT GATTGGCAGA 300  
 CTACCCAGCG GGTAAATTA TATACCAAAT TTGGGTTTnA TACCTACCGA ACCAGAnTCC 360  
 AGGCGGTGAT GTATG 375

35

(2) INFORMATION FOR SEQ ID NO: 727:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 471 base pairs  
 40 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 727:

TAAAAAAGCTT AGAGATGAAA ATCATATTAT TTATCTGTTT TTGGGACAAT TTTTACTAA 60  
 AAATGAAGAT CCATGGCATC AAATACTTAA TGATTTAGAA GTTACAAATT CTGTTGATAA 120  
 50 TTTTTTAAGG TCAATAAGTA ATAAGGCCAA AGAAACAAA AAAAGAGCTT TTATTATTAT 180  
 TGATGCGCTT AATGAAGGTG AAGGTAAAAG GTTATGGGGA AATTATTTTC AAAGCTTTAT 240

55

AGATGTTATA TTACCCAAAA ACGCAATACA AGATAACAAT ATTGTAGTAT TTCAGCATGA 360  
 AGGTTTTTAGT AAGGAAGAAA ACTATAATCC AATTGTATCT TTTTGTGATT TTTATGGATT 420  
 5 AGAGCTACCT AAGTTACCTA TATTAAATCC AGAATTCAAC AATCCATTAT T 471

(2) INFORMATION FOR SEQ ID NO: 728:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 1750 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 728:

TAGGATGTTT CACCCTgGCA ATTGcTCTAA GACATCtAcA GCAGTAGAAT ayCCTGTTTT 60  
 20 CGTctTTTTA ATAACAGGTA ATTGTAATGT CTCAAACAAT ACAACACCTA ATTGCTTAGG 120  
 AGAATTTATA TAAAAATCTT CACCAGCTGC ATCATGGATA TTTCGAATCA AGACGTCTAA 180  
 TTTTTCTTGA ATTTCTTTTT CCATTCTTTC TAAATCATGA ACATCTGTAA ATATACCAAT 240  
 25 TTCTTCCATT TCACCTTAAAA TCCTAGCTAG CGGTAGCTCT AAATCAGCCA AGAGTTCTAC 300  
 CTGATTGTAT TCTTCTAATT GTTTATCCAT ATTTGGTTTC GCAAAGTAAA TTGCATCAGT 360  
 AATAGAAGCA ACATATGGAT TTAAACATC ATCTTCAGGT ACCTTAAATT TCTTACCTTT 420  
 30 TCCATATATA CTCACATCGT CTTTCACAAA ACTTTGACCG TACAATGAAA CAACTGATTG 480  
 AACATCACTA ATCGTACGAG ATGGATCAAT TATATACTG GCCAACATAA TATCGAAAGA 540  
 AATATTTTGA ATATCAATCC CCAATCTATG TGATGCTACA TATGTTTTTT TAGCATCATA 600  
 35 TACGACTTTT TTCGAATTCG GATTTTCTAA CCATGAAACT AGTTCGACAT AATTATTTAT 660  
 GTCATCCGCA TTAATTACAA TATGTTTCTC ACCTGtAAAT aAAGAGAATT TTAAAAtATT 720  
 40 ATTtCGCAAA TAGtTACCAC CGtCTAATTC GAAATGGATG GCCGCTTCTT TcAATGAAGT 780  
 AAAATCcAAT ATTATCAAAA GACGTTTCcA ATTTCAAATG TCTTtTCTAT TGCATCTTCA 840  
 ACGcTtGCTG ATTGaTCAAT GTCAGCCAAC AATTGTTTGA ATTCTAACTT CTTAAACAAT 900  
 45 TCGATTTTTT CTGTGTGTTC ATCTtGakGA GTCATTAAAG TATCTTcaAG TTTTACTTca 960  
 ATCGGACTAT CTACATTAAt CGTTGCTAAT TCTTTACTCA TTAATGCATC TTCTTTGCTA 1020  
 TTTTGAAGTT TTTCTTTTAA CTTTTTACCT GAAATTTTCA CTAAATGTTC ATAGACACCT 1080  
 50 TCTACTGTGT CAAATTGGTT TAGCAATTTT ATTGCTGTTT TCTCTCCAAC ACCTGCAACA 1140  
 CCTGGTATAT TATCAGAAGT ATCTCCCAT TATCCTTTCA TATCAATAAT TTGATTAGGT 1200

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CCTTTTTTAG TGTAATAAAT GGTTACATTA TCCGTTGCAA GTTGTGTAA ATCTCGGTCT 1320  
 CCGTAATAA TAATGTCTG AAAGCCCGCT TTATCTGCTT CTTTACTTAA AGTTCCGATA 1380  
 5 ATATCATCTG CCTCATAGTT ATCTAATTCA TAACGTTTAA TATGATAAGC ATCTAATAAT 1440  
 TGGCGAATAT AAGGAAATTG CTCACCTAGT TCAGGCGGCG TTTTCTGGCG TCCACCTTTA 1500  
 TATTCACTAT ATTTTTCATG TCTGAAAGTC GTTTTACCTG CATCAAACGC TACTAAAAAA 1560  
 10 TGATTTGGCT TTTCTTCTTT TAAATCTTC TCTAGTAACA TTGCAAAACC ATATACTGCA 1620  
 TTGGTATGAA TGCTGCTTT GTTTGATAAC AAAGGTAATG CATAAAAGC TCTAAACTT 1680  
 15 AAGCTATTAC CATCGaTTAA TACTAATTTA TTCACAATTT TAACCTCCAG AACTAATTTA 1740  
 TATATnTGTG 1750

## (2) INFORMATION FOR SEQ ID NO: 729:

20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 439 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 729:

AAATTAATTT TAACATCCTT TCAAAATAGT TTTAACGGAT CcTCCcAAAA CGTAAACTCA 60  
 30 CATCAGTTAC TTGTAACATG CATTTTCTCC TTTTTCAT TCGATATTCT AACGGAAGAA 120  
 TTATATCATA TTATCGTCAC AGTTTCGACC TCATATAAGT TGTAATGATA GAATGACTCA 180  
 CACATGTTAT AATAATAAAG AATACAAGAA TCGAAGGAGA ATAAACATGG CATTAGACAA 240  
 35 AGATATAGTA GGGTCTATAG AATTCCTTGA AGTAGTAGGG TTACCAAGGT CAACTTACCT 300  
 TTAAAGGAC CAACGGTGAA ACGTAAAGTT AAACCAATCA GAATGAACGT GATGATTGAA 360  
 40 TTAGAAGTAG GGGAGnATAT AGTTCCTCAT TTATCCAACC GGTCAGGTGG ATTATTGCAC 420  
 TCAAATATGC nGnTATACG 439

## (2) INFORMATION FOR SEQ ID NO: 730:

45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 481 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 730:

55



AGTTTAGGAT TGATGACAAA GCCATTACGA CCAACAAATC CTAAACCTGC ACGTTCTGCT 120  
 ACTGCCCTAT CTGATAATAC ACCCGTATCT ACCATAGATT TGATTTCAAC ATCTGGAAC 180  
 5 TTAGATTCAA TAAATGCAGC TAACATGTCT AATCGTTTAC GCATAATTGT ATGATAATCT 240  
 TGACCCACG ATGCTCTAGC AAATAAGCCT CTGCGATCAC CTCTAACACT CTTAGGTGCA 300  
 CCTTTCAGTT TGTTAGGATA ACCAACTGCA ATTGCTATGA TTGACCTTGC TGTTGGTAAG 360  
 10 GATAATTTAG GCTCCGTTTC TAAAGCAATA TCAGATTCTT CAAaTCCTGA GGCATAACCA 420  
 TTTGCATGAT ATGCTTCTAG CTTTGTCTTC AATTCATCAA AGGGnTCGGC AGTAGTAAAT 480  
 15 C 481

(2) INFORMATION FOR SEQ ID NO: 731:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 828 base pairs  
 20 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 731:

GTGATGAAAA ATCTTTTTCT ATTGATTGAG AAAATAGTIA TTTATATAGT TTTTAAAGAA 60  
 AAAAAAGTGAT AATATTTAGC TAATCTAATG AAAATTGATT TATTGGACAA AAAATACATT 120  
 30 TTAAATGAGT AGAGGAGGCT GCAAWTGGGT TACAGAACTT TAAAAAGTAT TTTTCATGAA 180  
 CACAATGAAA GTAAAATGAA GGAAGAGTAT ATTAAAAGAT TTAATTCCTT mGCTTCTTTC 240  
 AATACTAATA TTAATATCAT ACCTATGGAA AATGGAAAAA AAGTTAATGA TTTGGAATAT 300  
 35 CCTCTATTCT TTATGGTGAC TAAAAACTA TCAAAAAAAC AAGAATTAAT ATCAATTAAT 360  
 AGTAGAAAAA TTGATAGAGC ACTTAATTCT TTACCATATG CAGCTAGAGA ACAATATTTT 420  
 AATGATTTAT TAATCGATGA ATTACAAAGT ACTAATGAAA TTGAAAATGT ATTTAGTACT 480  
 AAACAAGAGA TTGCACATGC GTTAAATAAC CAAGCATCAG AATTTCTTAA GTTCAGAGGC 540  
 CTCGTGGATC AATATAAAGA GATAGAACTT AATAAAAAAA TTAAAGTTGA TAATGTAAGA 600  
 45 GACATTAGAG CGATTTATGA TAAATTAGTT TCAAATGAAA TTAACGAACA AGATAAGTTA 660  
 GATGGAGAGC TATTTCTGTA AAATTTTGTC GGTGTGCATG ATGGGTCAAC GAATAAATAT 720  
 ATACATGTTG GGTACAACC TGAAACCAAA ATTGTTGAAT TTATAGGTGA AATGCTAACA 780  
 50 TTTTAAAAAT ATTTTGATGC GCCTCAGCCG TTCAAAATCA TGGCTAGT 828

(2) INFORMATION FOR SEQ ID NO: 732:

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(A) LENGTH: 1622 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 732:

|    |                                                                   |      |
|----|-------------------------------------------------------------------|------|
| 10 | CGTATGTTTC GAATTTTATG nATTGCATTG GATAATAGTA CCAGTTAAAA GAACTAAGAT | 60   |
|    | TGTAATTATC CCCCCTTAAA ATTCAAGAAT ATATTTTCTT AATCTATCAG CAAGAGGTTA | 120  |
|    | TATTTCAAAG TGTTTATTTT TAAAACAACA TCTAAAAGCC ATTTcATAAt AAwGTTAAAT | 180  |
| 15 | CaTTAGaATG TATAAAGATT CCaATTAATA AAAATAGATA AAATGCAATA AAGTTCCAAA | 240  |
|    | TACTTATTAT TATTCATCAC AAATTACGTG ATGCCCTCTA CAACACTAAA TCAAGGATGA | 300  |
|    | TATTTATTTT ATATACATTA GCATTCATTG TTTGCTTACC CACATTATCC TGTTTAGTCT | 360  |
| 20 | TTTTTATAAC TCTAGTCTTG AATGTCATAT TTACAAAGAA AAAAACACTA AAATATTTAA | 420  |
|    | AACTAACACT ATTTATTAC TTTGTTCTTT TATAGCACCT TTTATGTTTA TTTTCTTGTA  | 480  |
|    | TTCAATAAAT AGTATGGAGA TGATAATTTA AAGTAGATAT ATTGAAGTA TACTATAGAG  | 540  |
| 25 | TAAATTATAT TGGGGAAATA TGTAACGAA CCGGTTGATT TTATAGTGGA TTAACACTTC  | 600  |
|    | ATAGAGAATA TAATCAAGAA CAAAAACAGT CAATAGGTGT GAATTTTTTT AAAGACGGAT | 660  |
| 30 | CTGTTGCTAC TAAAAAAGA AGTATACAAT TCAATAGTTA AACCTTAAAA CAAGAAATAT  | 720  |
|    | TATTCAAAAT CAATGAATTT CCTATCTTAT TAGTTTTAAC AATATTTATT CTCATAGAGT | 780  |
|    | TTGTCCAATT AAATATAGAT GATTCAAATA TTTATAAGCA TACAAAAGAG CAGTAAGACA | 840  |
| 35 | TTTTCTAATA GAAAATAACT TTAGTGCTCT TTGTACATTA CTCATCAACT ATTGTAAATT | 900  |
|    | AAATAATAAA TAACTACCTA TTTTATTATT CAGCTAAAAA ATGCTCTGCT AAATATTTTG | 960  |
|    | CTGCGCCATC CTCTTCATTC GTGTATGCCG TTACATCTGA AGTTAATGCT TGGATTTCAG | 1020 |
| 40 | GGCGTGCAAT TTTCATAGCA ACTGTATAAT GACCAAATTC AAACATTGCT CTATCATTGT | 1080 |
|    | CGCTATCTCC AATAACTAAC GTTTCTTCTT GATGAATACC AAAATGTGCA ATCATTTCTT | 1140 |
|    | TAATGCCTGT ACCTTTATCA GTTTGATAAG CCATTGTTTC CGCATTAAAT CTTGATGAAT | 1200 |
| 45 | TTGArACACT AATCTGTAGT TGCACATGAT TTTGCTTTAA TTCATCTCTA AATGCTGTTA | 1260 |
|    | TTTTTTCTAA ATTAGAACTG AATAGATAAA TTTTGAATA TTCACCTTCA GGAAACTTAG  | 1320 |
| 50 | TTACCCAATC TATCTTACCA GCAAGCGCAT CTTGTCTTGA AGACCATTCA CTATGACTTA | 1380 |
|    | CGCCATTAAT AGGATCTTGA CTACGAATCA TATCTCGCAT CCATGTTTCA TCTTCTTTTA | 1440 |
|    | AAGAACTCT ATTACCTTCA AAAGGAAATA CCTCATAATA AATTTGTTGG CGCTTAGCTA  | 1500 |

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CTACTTCTCC AATTGTTCCA TTGAACTAA TGATGCCATT AACCGCAAAA TCTTGAGGTA 1620  
CA 1622

5 (2) INFORMATION FOR SEQ ID NO: 733:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 472 base pairs  
(B) TYPE: nucleic acid  
10 (C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 733:

AATGCCAnAT AAATCCAAAT TCTTTTAACG AACAAAGAGTG CCCAAGTTAT TGCTGATCGT 60  
TATGCCAGAT AnGCATATCA ATGATAATTA TGGTTTAGAA AGAATTCTA AGACAAATCA 120  
20 TGGATATAAT TATGTGTATT CCAATGATAA TTCAACTAGT AAGCAACATG TAAGTATTTC 180  
AAATCAAGGC ATAATAACGA AATAATAGAT GGAACAGTGT ATTCTAATTG GATATACTGT 240  
TTTTATTTTG CAATAATTTA ATTTAAAAAG GTGAATTCAA CTTATAAAAT GATGTAAATG 300  
25 TTATGTCAAA ATCAACCAAT CCGTAATGTA TTTTAAATG TTAATATAGT TCTGAAGAAG 360  
TATAAATGAG GTGTTGAAAT GGCTAAAAAT AAGAAAACgA ACGCGATGCG TATGCTTGAT 420  
CGTGCAAAAA TTAAATACGA AGTTCATAGC TTTGAGGTAC nTTAAGAACA TT 472

30 (2) INFORMATION FOR SEQ ID NO: 734:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 519 base pairs  
(B) TYPE: nucleic acid  
35 (C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 734:

CATAGCCCCA AATTTTTTCT ATTATTTGTT CACGAGTAAA GATTTGCTTA GGACGTGCTG 60  
CAAGCATAAA TAATAATTGA AATTCCTTGT TCGGTAACGT CATCGTTTTA TTAGATACTT 120  
45 GGAGTTCCAA ATAGGATTGG TTTAGCGTTA AGTTGCCAAT AGTCATTCT GAATTTGAAT 180  
TGATATTATA TCGACGTAAT ACAGCACGAA TTCTAAAAAT AAGTTCCTTA ACCTCAAAGG 240  
GTTTGTTTAC ATAATCGTCA GTACCGCTTA TAAACGCACG CTCTTTGTCA CTAAGTGCAT 300  
50 CCCGCGCTGT TAACATAATA ACTGGTATAT CATAATCATT TTTAATGTA TTACATAATT 360  
GAAAGCCGTC CATACCATCC ATCATAATAT CTACCACTGc AATATCGaCA CGCTGTTTTT 420

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GTTTTGThAA ATGGGCTAGC TATAATAATT TAGGGGATT

519

(2) INFORMATION FOR SEQ ID NO: 735:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 735:

ACTTGAAAAC GATAAACAGT ACTTCCAGC TACACATTGG AAAGCTATAA ATGGGATACC 60  
 TTATGCAGGC AGTAGTGATA TTGATGGATT GCCTCAAGAC GGTATCATTT CGGTAAATGA 120  
 TAAAAATAAA TTAGATAATT TAAAAATAGG CGAACAGGAA TTATTCAAAA TAGCATTGTA 180  
 CAGAAATCCC CAAACGGTAA ATTGTGGAAA ATAACAGTTG ACGATAGTGG GAAACTTGGT 240  
 ACAGTGCTAT TTTATTAGAA AGGAAGGTGC ATTATGGAAA ATTTGTATTT AATAAAGGAT 300  
 TTGGGAGCTT TAGCAGGTCG AGATTATAGA GCTAAGGAAA TACAAAACCTT ACAAGGAATA 360  
 GGCATTGCGC TGGGCTGACC ACCAGGTTT AnGTGnCCnC 400

(2) INFORMATION FOR SEQ ID NO: 736:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 780 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 736:

CTTTTTTATT GAAAAAGTGG TATTTGATTA TCTATTTACT ATTTATATTA GCGGCACTCC 60  
 TTATTACATT AACGACAATC CAACATGTAA CAGAAGATGA CAATCATnTT AATATAGGTG 120  
 TCGTAGATAA AGATCAATCA ACTGAAACGA AATTAATCTT AACTCTATT GGTAAGGGA 180  
 GTAACCTAGG AAAAAACGTG AGCATTAAAG CATATGATGA TAAGCAAGCA CATACTTTGT 240  
 TAAAAAACA TAACTTCAA GGCTATTTTG TTTTGTATAA AGGTATGACC AAGGCATTTT 300  
 ATAAACAAGG CGAACTACCA ATTTAGTAT ATACATATGA TCAACAATCC ATGAAAAGTG 360  
 TCGTGCTATC TCAGCTAACA GATTCTGTTT ACCAACGTCT TATGCGATCA ATGGGTGGCA 420  
 TCTTAGCTTT TCAAGACTTA GCACCGAAAG CATCACATTC TGACAGTATC AATGTTATGA 480  
 CTGATTTGCT GATTACAGGA TTAAACCGTT CAGGTGCatT TAACTTAGAA CCGATTCATT 540

CACTATCTTT ATTTACAGTT TTGAAAATGA ATCAAGATAC TGTATTGAAA GCGCGATTGA 660  
 AAATGTTTCA TTTTCTAAA GAGCGTTTAT TAATCATTCG TACGTTGATT ACATGGTTTT 720  
 5 ATACTATGTT ATGGGnGTAT CGnTGGTGTA GTTTGGAATG TGGTTCAGTA TTCCGAATnA 780

(2) INFORMATION FOR SEQ ID NO: 737:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 946 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 737:

TATTTAATTT CTTnATTnTG GTTTTAAATT nTAAGATGAC CATAAATGAA TTTCTTCTGC 60  
 20 TGTCATAGAA TTAGAGCAAA ATACGAGCAT AAATTTAACT AATTTCTTGC TTGTCTTATA 120  
 GTCTTGATTG CCTTGTA AAA ATGTTAGTAT TAATTGCTTC ATCGTTTCGA ATTGTTGTGT 180  
 TGATTTAATA GCGATTGCTA AACCTATATT TTTTCGAAA AGCTTTTCAA AACATCTATT 240  
 25 TAACAGGTTG TAATTCGTTT GGCTAATCTC AATATCGTGA ATATCGTCAA TGAAAACGAC 300  
 AGGTTTTGGT AAGTGCTCAA AGTTAATATC GTAATATTCA TTGAAAAtAA ATTGAAATAG 360  
 TTCATTGAAA TTAATAAATC GAACAAATAC TTTGGCACGC TGACTTCGAT CTTTCGGATT 420  
 30 AAAATCATCT ATATGAATAT CTGTTGTATT TGTAGCCAGT TGAGCTGTTA AATCAATTGT 480  
 TGAAATTAAC TCAGTGAATT GTGATACGTT ATCTTGTTGG AAGTGATTTT GTGGTGGTTC 540  
 AGTAATCTTG GAAACGAGTG AACGGAAGT TTTAGGACTA AAATGCAAGT AATTCTTAAA 600  
 35 TTGATTTGCA AAATTTGTAT GACTGTTAAA ACCGGCCAAT TCAGAAACAG TTGTAATAGA 660  
 ATGTTTTGTA GAAAGTAATA AATTGATGGC GTTAACAAGT TTAATACTTG TAAAATAATC 720  
 TTAAAAATTC ATACTCAAAT ATCGAACAAA AAGATTAGAA CAATATGATT CAGAGATGTT 780  
 40 GCAATGCATC GCTATATCTT TTAAAGACAA GTGCGCATCA ATATkGTCAT GAATATAGTT 840  
 TACACAGTCT ATGAACACCG GATTGCTTAA AGCAATATTT GGTAAATATT CATGATCTAT 900  
 45 TCTTATAAAA GCTTCTTTAA GTAAAGTGTC TATnATACTT TGACCT 946

(2) INFORMATION FOR SEQ ID NO: 738:

(i) SEQUENCE CHARACTERISTICS:  
 50 (A) LENGTH: 397 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 738:

|    |                                                                   |     |
|----|-------------------------------------------------------------------|-----|
| 5  | TTTATTTGAT GATGTACTAA AGCAAGATGA AAGATTTGTT ATTGTAGTTC AAGCATTAGA | 60  |
|    | AGAAAAGAAC GGACAATTAT TAAAGAGAAC TTTAAGGGAA TATCCCGGTT TAAACCATAA | 120 |
|    | ACAAATGAAT GATTTATTTA TGCACTTAAA GGAATTATTT TCCGAAGAAT CATTTGCTGA | 180 |
| 10 | AAACCAATCA GCGTTCAGTA TTACAGTTTA TACAAATTTA GATTATACTG CTGACCAAAT | 240 |
|    | ATATGCTCAT GTAAAACGTT TCAGAGGTAA GCATGACTGG ACACAAACAG CTAAATAAAA | 300 |
|    | TCAAGATGCT TGCAGTGgAT TkTAACmATT AATGtTAGaT gTcmCyGcAT TTTTaATGCC | 360 |
| 15 | ATTCCGTAAT TAATCCGGAT GGTCCAATTT AATTAAC                          | 397 |

## (2) INFORMATION FOR SEQ ID NO: 739:

## (i) SEQUENCE CHARACTERISTICS:

|    |                            |
|----|----------------------------|
| 20 | (A) LENGTH: 915 base pairs |
|    | (B) TYPE: nucleic acid     |
|    | (C) STRANDEDNESS: double   |
|    | (D) TOPOLOGY: linear       |

25

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 739:

|    |                                                                   |     |
|----|-------------------------------------------------------------------|-----|
|    | CAAGGTATTT CATTGACCC ATTCACACCA TTAATAGTGG CAGCAGCATT ATACTTTGTC  | 60  |
| 30 | TTAACATTTG TACTTACACG CATTATGAAC ATGATTGAAG GGAGATTGAA TGCCAGTGAT | 120 |
|    | TAAAATAAAC AATCTTAATA AAGTTTTTGG AGATAATGAA GTTTTAAAAs ATATCAATCT | 180 |
|    | TGAAATCAAT CAAGGGGAAG TAGTAGCAAT AATAGGTCCA TCTGGTAGTG GTAAAAGTAC | 240 |
| 35 | ATTGTTAAGA TGTATGAATT TATTAGAAGT ACCTACTAAA GGTCAAGTGA TTTTGAAGG  | 300 |
|    | CAATGACTTA ACGGAAAAAG GGACACAAGT AGATAAACTA CGTCAAAAAA TGGGTATGGT | 360 |
|    | ATTTCAAAAC TTCAACCTAT TTCCACATAA AAAAGTTGTC GATAATATTA TTTTAGCTCC | 420 |
| 40 | TAAATTATTA AAGAAAGATA ATAACGATGA ATTACATAAG GAAGCATTGT CGTTATTAGA | 480 |
|    | TAAAGTGGGA TTAAGAGAAA AAGCAGATGT ATATCCGAAT CAATTATCAG GTGGTCAAAA | 540 |
| 45 | ACAAAGGGTA GCAATTGCAA GAGCTTTAGC AATGCATCCA GATGTTATTT TATTCGATGA | 600 |
|    | ACCAACTTCA GCATTAGATC CTGAGGTAGT TGGTGATGTA TTAAAAGTAA TGAAAGACCT | 660 |
|    | AGCCAAAGAA GGTATGACCA TGGTGGTTGT GACACATGAA ATGGGATTTG CCAAAGATGT | 720 |
| 50 | AAGTGACAAA GTCATATTTA TGGCAGATGG CGTTGTCGTA GAGTCAGGCA CnCCAGTCGA | 780 |
|    | AATATTTGAA CAACCGCAAC ATGAAAGAAC ACAAATTTT TTAGCAAGAG TATTATAACA  | 840 |
| 55 | ACCTAACGAG GCTTGAATAT ATGATACGCA CCACAAAGTT ATATCATATA TTCAAGCTTT | 900 |

## (2) INFORMATION FOR SEQ ID NO: 740:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 435 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 740:

```

AGTAAATGCG ATGTTGCATG GAGGCTATAG CAATGAGCAA TAAAGCTTGG GGCGGTAGAT      60
TTGAAGTACA ACCTGAAGAG TGGGTTGACG ACTTTAACGC ATCCATTACT TTTGATCAAA      120
CGCTCATAGA TCAAGATATC GAAGGCAGCA TTGCACATGC AACTATGCTT GCGAATCAAG      180
GCATTATTAG TCAACAAGAC AGCGAACAAA TTATACAAGG ACTAAAATCT ATTCAACATG      240
ATTATCATCA AGATCAAATT CAATTAGTGT CATCATTAGA AGATATTCAT TTAAATATTG      300
AACATGgAAT TAATTAAACG TATCGGTGgA TGCTGGTGGT AAGTTGCATA CTGGACGCgT      360
AGtAAACGAT CAAGTTGcAA CAGACATGCA CTTGTACACT GAAGAAACAA GTGCAAGnnn      420
TCATCGCATT GGATG                                          435

```

## (2) INFORMATION FOR SEQ ID NO: 741:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 1198 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 741:

```

AATATCATAA CCAAAGCTTG TCATTACTTA TATGTAAAGA TTAGAGGCTA ATTACATAAT      60
CCTAACTTAT TTAACAGGAA GTCATGAAAA CTATATTACA ACTAAAAGTA TAACTTTCCA      120
TCACCAAAGT CAGAATTTAT TGAACACTC AACTGATAAT ATAGAAGGCT AATTATAAAA      180
ATACCTGGCG ATTAATAAAC TGTTTCCGTT TTTTAGCACT TAATATATTT AAAAAGACAA      240
ATAGAGCCCT TTCAGGCTCT ATTTnCTGTA TCCTTAACAA CAGAAGCTGT TAAAACTACC      300
CGTCTTTTcA CAaCCAAaGc TaCAAAAAaG aTgGCTAGTT ATTCTTTTCGT CACCCGCTGA      360
ATCATTAGTG TTGTTATTTT CTTTAACTTG CACGTCTAAA TCAAGAaCTT TTTCCAAaGA      420
TaAAACCCCC TATTTAAAAG TTGAAGTTAA GACCCcTTCA ATTGTCATAT TAATCATTAC      480
CACACAATAA ATCAATGAAT TTAATAATAA TTATTTGTTA TTAATTGTA AATCGTCATT      540

```

TGAATATTTT TTGTTTAACT CTAAATTTTC GGGTTTAACT TCCTCTATTT CTAACAGTTA 660  
 TACTCCAGGA TTAGTTTCTT TAGAATCOGT ACCGATTAAT TTAACAGTAT GGTTTTGCCA 720  
 5 GTCAACTTCA TAAGTAGATG TAAACGTTAC TGTATTTTGA TnTTTGTAGT TATTTCCAAC 780  
 CCAGTGTAGT CGATTCCATT GATTAGTATA TCTATCCATT TCTCTTTGGT AAGTTACTTT 840  
 10 GATTTTAGAT TtTTTTGTAT CATTTTGTTC ATGAGAAAAGT ACGCTTATAA ATTCTGGGTT 900  
 AAAGTTACCA CGCGCCAATA AAGGCATTTG ATGTGTTGGC AAGAAATTTT GACCAGCATT 960  
 TGAACTACTT TGTCTACCAC CTAAAAACAG TTCATTACCA TATGTTGGGT CATAACTATC 1020  
 15 TCTACCATAT GGTCCCCAAC CATTATTCAT AATTTTGTGC GCCTCAACAC CCCAGCCAAT 1080  
 TGATTTATGA TTTGTTTTC TATCAATCGT AGTTCTGTAA CTTTCTTGTT TATAATTTAT 1140  
 CGTTTCTGAA AATGATTTTG ATCCATTTAA TCCACCTGAT AAGCCATTAG ATATATTA 1198  
 20 (2) INFORMATION FOR SEQ ID NO: 742:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 818 base pairs  
 (B) TYPE: nucleic acid  
 25 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 742:  
 GTGGCATATn CAACTACTA CTGAAAGATC AATTACATAC GTACAGATTT TGCAAAATGA 60  
 TCAAGATTAT CCAACAATTT TTAGATGAGa CAAAACGTAA ATCTGTAATT AATTcAGATG 120  
 35 TTAATGTAAC GGTAAAGAT AGAATAATGA CTTTATcAAC GTGCGAAGAT GCATATAGTG 180  
 AAACGACGAA AAGAATTGtT GTTGTCGCAA AAATAATTAA GGTAAGTTAA ACAGAAAmGA 240  
 GGATAATTAT GAAATTTATG GCAGAAAATA GGCTGACGTT AACaAAAGGA ACAGCAAAAG 300  
 40 ATATTATAGA ACGATTTTAC ACGAGACATG GGATTGAAAC ATTAGAAGGC TTTGATGGCA 360  
 TGTTTGTAC ACAAACCTTTA GAACAAGAAG ATTTTGATGA AGTGAAAATT TTAACAGTTT 420  
 45 GGAAATCAAA GCAAGCTTTT ACGGATTGGT TAAATCTGA TGTCTTTAAA GCAGCGCATA 480  
 AACATGTTAG AAGTAAAAAT GAAGATGAAA GTAGCCCGAT TATAAATAAC AAAGTAATTA 540  
 CATATGATAT AGGCTATAGT TACATGAAAT AATTGAATTT AAAGAGGTTG CAGTACTTGT 600  
 50 TATGACAATT GGTATTGTTA GCTTTTGTA CGACCATACA TGATACCGAT GATGGTCGTT 660  
 TTTTAAATGa ACACAAACAT GCTAACAACA AATTGCTAAA ACATAGTTTG aTTTGAATGT 720  
 55 GgCTTTGGAA AATAATCATC CatTATATCa TTtTGGATTn TATTTTGGAA GAAGAAAAGA 780



## (2) INFORMATION FOR SEQ ID NO: 743:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1209 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 743:

|    |                                                                                |      |
|----|--------------------------------------------------------------------------------|------|
| 5  | TGCTGGTAAA TCTTCCCTTA TCAAGTCTTT AATTGGTGAA TTTAATGCTA CCGGTACTAA              | 60   |
| 15 | ATTGTTATAT AACAAACCTA TACAACAACA ACTGCAACAT ATTACATATA TTCCACAAAA              | 120  |
|    | AGCACATATT GATTTAGATT TTCCTATAAG TGTGGAACAA GTGATTTTAT CAGGTTGCTA              | 180  |
|    | CAAAGAAATT GGATGGTTTA GACGACCTAA TAAATCAGCA AGGGATAAAC TCAAACAGTT              | 240  |
| 20 | ATTAAGCGAT TTAGAATTAG AATCTTTACG TCATCGACAA ATTTCAGAAT TAAGTGGTGG              | 300  |
|    | ACAATTACAA CGTGTGCTAG TAGCAAGAGC ATTGATGTCC G <sub>n</sub> AAGTGAAG TTTATTTTCT | 360  |
| 25 | AGATGAGCCG TTTGTGGGAA TTGATTTTAG TAGCGAAAAA tTAATCATGA CAAAAATcGA              | 420  |
|    | GAACTTAAaA CAACAAGGAA AACTTATTcT TATCATCCAC CATGATCTAT CAAAAGCAAA              | 480  |
|    | GCAATACTTT GATCGCATTA TTCTATTAAA TCAAACATTA CGATACTTTG GTGATAGTGA              | 540  |
| 30 | AGAGGCTATG AGTGTCACTC GCTTAAACGA AACATTTATG AGTAGCACTG ACTGTAGTGA              | 600  |
|    | CCCTAGTCAA AGGAGCAATA TAACATGTTA GAGTTTGTGCG AACATTTATT TACATATCAA             | 660  |
|    | TTCTTGAATC GAGCATTGAT AACTTCAATT ATTGTAGGGA TAGTTTGTGG TACAGTTGGT              | 720  |
| 35 | AGTTTAATTG TATTACGTGG TCTTTCATTA ATGGGAGATG CAATGAGTCA CGCAGTATTA              | 780  |
|    | CCTGGTGTTG CCCTATCATT CTTATTTGGT ATTCCAATGT TTGTAGGCGC ACTTATAACT              | 840  |
|    | GGTATGATCG CAAGTATTTT TATCGGTTAT ATCACATCTA GTAGTAAAAC GAAACCTGAC              | 900  |
| 40 | GCCGCTATTG GAATTAGTTT TACCGCTTTC TTAGCTTCGG GGATTATTAT TATTAGCTTA              | 960  |
|    | ATAAACACTA CGACAGATTT GTACCATATT CTGTTTGGTA ATTTACTGGC AATCACAAAT              | 1020 |
| 45 | AGTGCATTTT TAACAACTAT TGTGATTGGT TCAATCGTCC TTATTCTAAT CATTATTTTC              | 1080 |
|    | TATCGTCCAT TAATGATTTT TACATTGAT CCAACGTTTA GTAGAATGAG TGGTCTAAAT               | 1140 |
|    | ACGACGTTAT TACATTACTT TGTGATGTTG tTACTCTCAT TAG <sub>n</sub> AACAGT AGCAAGTatT | 1200 |
| 50 | CmAACGGTA                                                                      | 1209 |

## (2) INFORMATION FOR SEQ ID NO: 744:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 675 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 744:

|    |                                                                    |     |
|----|--------------------------------------------------------------------|-----|
|    | CCGCCTTTCG TAAACCTAAT ATAATACGAA ATTTTCGTAT TGTCAACATT AAATACGTTT  | 60  |
| 10 | TTTTCGTAAA AAACCTTACT ATGATATGAA AATTTTCGTAT AATAAGAAAA AAGGAGGTAA | 120 |
|    | GTAATATGAA CAAAGAmAGm AATATTATTA TAGCCAAAAm CATTAGAAAA TTTCTCAACG  | 180 |
|    | ATTCAAATAT GTCTCAAAAG AAACCTGCTG AaCTCATTAA CATAAAACCA TCTACTTTAA  | 240 |
| 15 | GCGATTATTT AAATTTACGT TCCAACCCCT CTCACGGCGT TATACAAAGG ATAGCTGATG  | 300 |
|    | TTTTTCGAGGT TGGTAAAAGC GACATAGATA CTACATACAA AGACGATAAC GACATCACTT | 360 |
|    | CCATATACAA CAAACTCACA CCTCCCCGCC AAGAAAACGT ACTTAACTAT GCAAATGAAC  | 420 |
| 20 | AATTGGAAGA ACAGAATTCT AAAGGAGATA ACGTTGTAGA TATTAATTCA TATAAACAGG  | 480 |
|    | AGAAAACCTCC AGTTAACGTC AATGGTTGCG TCTCTGCTGG TGTAGGAGAA CGTTTACACG | 540 |
|    | ATGAAACGCT ATTTACTGAA ATGGTTAAAG GACCTATCCC CACACACGAT TTAGCGTTAA  | 600 |
| 25 | AAGTAAATGG TGATTCTATG GrACCTATGT TTAAAGATGG CGAAATCATA TTTGTGGAGA  | 660 |
|    | AAACTCACAA TnTGA                                                   | 675 |

30 (2) INFORMATION FOR SEQ ID NO: 745:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 924 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 745:

40

|    |                                                                    |     |
|----|--------------------------------------------------------------------|-----|
|    | CAGGTGTCAT AGTTGAACTT GGtGGTTTTG GACTAATCGT TAAATCATCA ATTTGTGTCA  | 60  |
|    | TCCAAGGTTG GAATTTACTG CCTTGTGTCT CCAGTGCCTT GAAAATACCT TTATCTTGAA  | 120 |
| 45 | ATAAGTCAAC TAACTCTGG ATACCTTTAA TTAATGCTGG GTTACCACCA GAAATTGTAA   | 180 |
|    | CGTGGTTAAA TAAATCGCCA CCAATTCGTT TTAATTCATC ATAAATTTCT TCAGCGGTCA  | 240 |
|    | TGAGTTTTAT ATCGCCTTTA GCACTACCAT CCCAAGTAAA TGCAGAATCA CACCAGCTAC  | 300 |
| 50 | AGgATaATCA CATCCAGCTG TTCTCACAAA CATCGTTTTT CTACCGATTA CTCGACCTTC  | 360 |
|    | ACCCTGAATG GTTGGACCGA ATATTTTCGAG TACAGGAATT TTAGCCATTA GTTACACCTG | 420 |
| 55 | TTCTTTTGGT CTAAATACGA CATAAATTGT TGGTGTCTCT CTTACAAATA CTTGAATACA  | 480 |

TACGATTTCa GTTGAAGGGA TTTTGT TTTT AAAAGCAGGT AAGTTATTTA ACAGTTGATG 600  
 GTCAAATTTA CCGTGTATCA TCTTTTTCaA ATGGCTAAAG TTCACTAAGA AGCCAGTGTC 660  
 5 ATCTAGTTTA TCACCGACAA TTGTTAAaya cAAAGTAAGT ATGACCATGG ACATTTTGAC 720  
 AAATACCTGC TTCTTCACAT GGAATGTGAT GTGCAGCCGA AAAATTAAAA TCTTTATTTA 780  
 10 ATTGAATTG ATATGGATGC GTTGTACTAG GATAGATTTG TTGTAACATT TTAAAGCGCT 840  
 CCTTTACTTT CAAGATATTG ATTTAGTCCA CGTTGACGTA AATGACAAGC TGGACATTCA 900  
 CCACAGCCAT CCCCAATGAT ACCG 924

15 (2) INFORMATION FOR SEQ ID NO: 746:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 971 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 746:

ATCTTTTGGG TATTTTCTAT ATTAGCTGTT GTTTTCTTAG TATTATTAG TTTTGCTGTT 60  
 GGTGCATCAA ATGTACCAAT GATGATTTTA ACATTTATAT TACTCGTTGC AACCTTTGGA 120  
 30 ATTGGATTTA CTACAAAGAA AAAATATCGA GAAAACGATT GGCTATAAGT TATATCGACA 180  
 ATAACACGCG TTGATTTAAG ACCACACATG TTCATGATGA ACATTAACT GGTTTTATAT 240  
 TGGCGCGTGT TTTTATTATT TAAGGTATAA AAGCGTAATA TGTTACCTAA TTGTAGGAC 300  
 35 TACATATTAC GCTTTTGCTA ATTATTTTGA TTTTCTTTTA AATCGTTGTT CATGTAATTG 360  
 TATTAACGCA TCATGGTGGG GCTCTAAaTA ATCATtGCTA ATTcTTGATG GAGACcmCGA 420  
 TTtCCAACTA rGATkGAATT kGGACcmCTA ATkGTTAATG GTcctCCTAG TAAATTGGAA 480  
 40 GCTTGTCCTAT TaCTTCcATA TAAAtAAcCA ATCCGCCAGC AAAtCCCcAT GGTKGAAGTC 540  
 TTGGCGTCAT ATATGCTTCT AAaTTACCTG TAGCAACTGA AACGATTTCA AGCGCTGCAC 600  
 TACCATATGC CCTTGCACTT CTAGAATCAT TAACAATTTTc TTTAAAGATT TCTCCTAAAA 660  
 45 TTGTTTAGT TAACCAGTTC GGATTGATCC CAATAATGCT TTGTCTTAGA TTAGAATCAT 720  
 TCAATGGTTT CAAGGGTTGG CTACCACGAT ATGCACCTTC CCCTACTTTA GCATGATATA 780  
 50 AGACATCAGC CATAACATCA TATACAAAAC CTGCATAAGG TTTACCATCG ATATAAATAC 840  
 CAATTGAAAT TGCGAAATTT TCTTGTTGAT GAACAAAATT CAATGTACCG TCTATTGGGT 900  
 CAACAATCCA TACCGTACCT TTGGAAGTAT CGATGTCATG ACCATGCCCT TCTTCACCTA 960

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## (2) INFORMATION FOR SEQ ID NO: 747:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 865 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 747:

```

TTCTCGTCAC TGTACGTTGT ATTGCGGCAT CATCCATTAT GATACGTTCA GACATATTCT      60
CACCCCTTTCA AAATTTAGAA ACAAAAAACC TCATGTCCTT AATATCGACA TGAGGTTTAG      120
TATATACAAT CAGCCTATTT ACATAGAAGA ATCGTAGTAT TACTACTTAT TCTTGCATAT      180
GTGAAAGTGT TATGATCATT TTAGTATATA TCTATATTTT CATGTCCTTG ACGTCTCTCT      240
GGACGCTCAA TTAAAGACTC TTTATGTTGT ACTTAAACTG TTATAAGGAT AATACTAATC      300
AGGCGCTTTG TCAATCTATA TTGAAAAATT AACCATACTC AGTAAAAATG TTAACCTTAA      360
TCTATTTTAT AATGTGTTTT CATTTAAAAA AAACGAAAC GATAAACACT TATAGTTTAC      420
ATAATAATGT TATCGTAATT ATAGCACGAC ACAATTATGC ATCTCTTTTT CGAATTGTAT      480
CTAATAAATC TTCAAAGTCT TGTGGTAATT CAGCATGTCT TTCAATATAT TCACCTGTTA      540
CTGGATGTTT GAATCCAATA AGTCCAGCAT GTAGAGCTTG ACCACCAATA TCCAATGTCT      600
TTTTCGGTCC ATACTTTGGA TCACCAACTA ATGGGAAGCC AATATATTTC ATGTGAACAC      660
GGATTTGaTG CGTACGTCCT GTTTCAAGTT GACATTCAAC AAGCGTATAA TCTTTAAAAT      720
GTTCTAGTAC GTTAAATGT GTCAGTCTT CCTTACCATC ATCAACAACA GCCATAGATT      780
GACGATCATT TTTGTTTCTA CCAATTGGCG CATCGATTGT ACCGTAATCA TGAGGAATAT      840
TCCCGTGGAA CTAAAnCGAT ATAGT                                         865

```

## (2) INFORMATION FOR SEQ ID NO: 748:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 818 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 748:

```

ATAACATTGT GGAGCCTATG ACATTGATTT ATGTCTCGGT CTCAAATGTT CTTGTAAAAA      60
AACTAAGTAT AGTTGAATTT TAAGTTAAAA AAATTGTTTT TGCAAAAATA AAATAATCCA      120

```

TTTTAGGTTC TTCGCCTCTA AAAATCCTTG CGaTATTAGA GCGATGTCTA ATTATCAATA 240  
 TGATTGAAAC TAAGAAACTA ACGACTAATA AAATATAGTC TTGAATGATA AGCGAGCCAA 300  
 5 TCACACAGCA AATTGCTGCA ACGATACTTG CTAAAGAAAC ATATTTAAAA ATCTTCAATA 360  
 CAATAAAGAA GATAATTGCA AGTATTAGTA AAAGTATCGG ATTGACTCCC AAGACGACAC 420  
 CTGCACTAGT TGCAACAGCT TTGCCACCTT GGAATTTTAA ATAAACAGGA TAAACGTGTC 480  
 10 CAAGTATAGC GAATAAGCCA ACAATTAAAC CATTTGTAAA AAAAGTACTA ATAGGGCCAT 540  
 CTGCGTGAAC TTGTAACCAT AAAGGAAGA AAACAGTTAT GAACCCTTTG AAAATATCTA 600  
 15 GAAATGTTAC CAAGAATCCT GCAGGACGAC CTAATACTCT AAAGCTATTA GTAGCGCCAG 660  
 TATTACCACT ACCAAATTGT CTAATATCTT TTTTGAAAA TAATTTTCCA ATTACGAATC 720  
 CACTTGGGAA AGCGCCGATA AGATAACTTA GTAGTAACAT GACGATTATC ATCATAAATA 780  
 20 TTACACATCC TTTAATATCT TAGGACTATT TTATCATA 818

(2) INFORMATION FOR SEQ ID NO: 749:

(i) SEQUENCE CHARACTERISTICS:  
 25 (A) LENGTH: 971 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 749:

ATATCCAATa ACTGTTcATT GTCTTGATAT TCCTTAAATG TTTcATAATG CTCATTAGAA 60  
 35 ATGACAATTT CAAGCAACCA ACCCGTGCCA CTTTCTCTT TATTAATTAT TACGCCATCT 120  
 TCTAATTCAT ATTCTATAAT TGTGCCGTGT TCATTcACAA TTTGAAACCT TACTGCTTTA 180  
 AAAGTTTTCA TATTCcACA TCCcATTAGT TTAATATTTA TGATTTTTGA ATTATTTAGA 240  
 40 AGATTTAAGG TCATTTcATG ACTAATTTCT TTAAATATAA CAAATAACGA GATGCTATAG 300  
 CTATTAATTA TATAAAATTT GcCATTTTGa CCATTTTTAA GCTAGTAATT AAGATATAGG 360  
 cATAGGAGGT GAATCACACA CTACATGCTA AATAAAATCG TAATTGTCGG GAGcTGACGA 420  
 45 AAGACGCACA AATATTTGAA AAGGAGGATA GAAAAATTGC AACGTTTTGT GTTGCAACGC 480  
 ACCGAAATTA TAAAGATGAA AATGGAGAAA TCGTCTGTGA TTACTTATTC TGTAAGCAT 540  
 TTGGCAAGTT AGCTTCTAAT ATAGAAAAAT ATACTAATCA AGGTACATTG GTTGGTATAA 600  
 50 CTGGTCAAAT GAGATCAAGA AAGTATGATA AAGACGGACA AACACACTTT GTCACTGAAT 660  
 TATATGTTGA AACAAATAAA TTTATGTCCC CTAAATCCCA AAATAATGAA ATTCTCTCAG 720

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TCCAATTATC CTAAACATCC TTAATATACA TTTAATCCAT CCTAAATTTT TTATAGATCT 840  
 AATTAACTTG AAATATACTC ACTTAAAAAC GACTTACATG ACCTAGTACT GTTGGTAAGG 900  
 5 TCGnCTTTTG GTGTAGTTTT CCTAATAGAn AATAGACnTA GGTGCCCCAA CCGATTACAT 960  
 AAAAAATTGC C 971

10 (2) INFORMATION FOR SEQ ID NO: 750:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 832 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 750:  
 20 ATAGATTACT CTTTGTATCT GTAGATCCTA CTGTAAAGAC ATTGTCCATA GATGCAGGAA 60  
 CATCTTTCAC TTCGCCATTA CCTTGATATT CACGCTGTAA TTTTAGTTTC TGTTTGTCTAT 120  
 TGACATCAAT ACCATCATT A CCAGCTGCAG CAACAACGAT AGATTTTTTC TTCTTGGCGT 180  
 25 AATTGATTGC TTTCTGTAAC GCATCGTATT CTACTTTTTT ATCTTTTCTA AATGTTTGAT 240  
 GGTCATTTTT GTCCAAAATA ATATAACTAC CAACACTAAT ATTAATGACT TGaTTTCCAT 300  
 CATTGTCAGC TTGAACAATC GCTTTTGATA CCAAAGCAG TTCTGTTTTT TTACTIONAA 360  
 30 ACACGCGATA CATTGTAAAT TTGTTATTCG GTGCAACACC TATTAACCTA CCATTAGCAC 420  
 TCGTTTGACC CGACACCATC GTGCCATGTC CTTTCTATC ATTGACATCG TGAACATCAC 480  
 CTGTTTCCTC CGGTTGAGTA CCTCTAAAAC CGTTTAAAGG TACTAAATTT TTAGAATCAG 540  
 35 TCGAGAAAT ATTITTCAAA TCGTCATGGT TTTTCATCAC ACCTGTATCT ATGATTGCTA 600  
 TTTTGGTGTT AGCATGTTTT GGCAAATCAT CATACGATGC ACCATTATTG GTTATTTTAT 660  
 40 TCATATCCCA TTGTCTTGAA AATAATGACT CATTGTATGT TCTGTCTATT GTTTTCTCGC 720  
 TAGTAATACA AGTTGAACAT GTGGCATTGA TATATTTAAAT ATCATTTTTTA TAGTTTGCTA 780  
 AAGCATTAGC ATGCATTTTC GTCATTTTAA TCTGTGCCAC ATGGAATTCC GG 832

45 (2) INFORMATION FOR SEQ ID NO: 751:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 475 base pairs  
 (B) TYPE: nucleic acid  
 50 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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GTAATATCAA TCTCTCATA AGCTGAATTA TTTTCATGCA CTTCTTGATG TGATGATTG 60  
 TCACGAACCG CTACAACTAA CATTTTATCG TCTAAAATAA GTTGTMTATA TTTTCTAAT 120  
 5 TCATCAGGCG CTAAGTTGTA GCGTGATAAA ACTGCATGTT CACCATCTTC TCCTGTTAAC 180  
 AGTTTAGTCA TTCTATCACT AAATGTTCCA CTGTGTGAGA TAAGGGAGAT TTCAGAGTCG 240  
 TGTAAGTCAT TTAGGTGTAA TTTACTTTTA CTAATAATTG TTAGCTCTGA TTCTAAATAA 300  
 10 CCTTCAGATT TCTTTTGATT GATTACGTTG TATAATTTCG CAGTGTCACT TACTACAGTA 360  
 ATATCTGCCA TAGTTGTCGC CCCTTTAAAA ATTGTTTAT tTAATCTTTT ACCCTTCTTA 420  
 TnATAAAGTA AAACCCTTAC ATTATTAAGT nATAAGTCTT CATTCGCATT AAACG 475  
 15

(2) INFORMATION FOR SEQ ID NO: 752:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1019 base pairs  
 20 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 752:

GCGACACTTG TGAGTTCTCC AGCAGCAAAC GCGTTATCTT CAAAGGCTAT GGACAATCAT 60  
 CCACAACAAA CGCAGTCAAG CAAACAGCAA ACACCTAAGA TTCAAAAAGG CGGTAACCTT 120  
 30 AAACCATTAG AACACGTGA ACACGCAAAT GTTATATTAC CAAATAACGA TCGTCACCAA 180  
 ATCACAGATA CAACGAATGG TyATTATGCA CCCGTAACCT ATATTCAAGT TGAAGCACCT 240  
 ACTGGTACAT TTATTGCTTC CGGTGTAGTT GTAGGTAAAG ATACTCTTTT AACAAATAAA 300  
 35 CACGTCGTAG ATGCTACGCA CGGTGATCCT CATGCTTTAA AAGCATTCCC TTCTGCAATT 360  
 AACCAAGACA ATTATCCAAA TGGTGGTTTC ACTGCTGAAC AAATCACTAA ATATTCAGGC 420  
 40 GAAGGTGATT TAGCAATAGT TAAATTCTCC CCTAATGAGC AAAACAAACA TATTGGTGAA 480  
 GTAGTTAAAC CAGCAACAAT GAGTAATAAT GCTGAAACAC AAGTTAACCA AAATATTACT 540  
 GTAACAGGAT ATCCTGGTGA TAAACCTGTA GCAACAATGT GGGAAAGTAA AGGAAAAATC 600  
 45 ACTTACCTCA AAGGCGAACT ATGCAATATG ATTAAAGTAC AACTGGTGGT AATTCAGGTT 660  
 CACCTGTATT TAATGAAAAA AATGAAGTGA TCGGaATTCA TTGGGGCGGT GTACCAAATG 720  
 AATTTaATGG TCGGTATTIT ATTAATGAAA ATGTACGCAA CTtCTTAAAA CAAAATATTG 780  
 50 AAGATATCCA TTTTGCCAAC GATGACCAAC CTAATAACCC AGATAATCCT GATAACCCTA 840  
 ACAATCCTGA TAACCCTAAC AACCCAGATG AACCAAATAA CCCnGACAAC CCTAACCAACC 900

55

CAATTAAGTT CGTCTAGATA AAATAGGAAG CAAAGTCTTA GCAACGTAAA ATATTTTGA 1019

(2) INFORMATION FOR SEQ ID NO: 753:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 533 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 753:

|    |                                                                   |     |
|----|-------------------------------------------------------------------|-----|
| 15 | ATTCTTATCC CAGGTAGGTG nTTTACTTCT TATATTAGGT GCAATAACTC ATGCCACTCA | 60  |
|    | TCTTGTGGCA CAACATGAaT CGCATTITTC AAAATTGCAT GTCCTGCTTG ATCAGTCAAA | 120 |
|    | CCGGCAGCAT GATCAAAATG CATATGTGTC ATTAGCACAT AATCAATATC CTTGGCGTT  | 180 |
| 20 | AAATTATAAT TTGCCAAATC AGCAATTATA TGACTTTCTT CATCTACTCC AAAATTACGT | 240 |
|    | AATTGCTTTT CAGATAATTT ACCATTACCA ATACCTGCAT CTATAATCAA ATTATATTGA | 300 |
|    | GCCGTTTGAA TCAAAATTGG ATGTGTCGGT AAATTGATTG GATTTCGTTT ATTTGCATTG | 360 |
| 25 | TATTGCTTTG ACCACAACGG CTTCGGAACA ACACCAACA TTGCACCGCC ATCCATTTTT  | 420 |
|    | GTATTGCCAC CATTAGaTA ATGAATAGaT ATATCCCCGA TTTTCATAAC ATCACCTATT  | 480 |
| 30 | CTTCTGTAT TCGTTATTAC AATTAGCATG TGTTTATTAC ATCATATCAC TAT         | 533 |

(2) INFORMATION FOR SEQ ID NO: 754:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1225 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 754:

|    |                                                                   |     |
|----|-------------------------------------------------------------------|-----|
|    | ATCCCCTGCA AGTGATAAAA TTATTGAAAA AGGCGACATG ATTACATTAG ATTTTGGCGC | 60  |
|    | GTATTATAAC GGCTATTGTT CAGATATTAC TAGAACATTT GCTATTGGAG AACCAGATCC | 120 |
| 45 | TAAACTGAAA GAnATATATC AnATAGTACT TGAATCTCAA ATGAAAGCAA TTAATGAGAt | 180 |
|    | TAGACCTGGC ATGACTGGTG CAGAAGCTGA TGCCATTTCa AGAAACTATt TAGAGTCAAA | 240 |
|    | AGGGTATGGA AAAGAATTTG GACATTCACT AGGACATGGT ATTGGTTTAG AAATCCATGA | 300 |
| 50 | AGGGCCAATG CTGGCTCGTA CGATACaAGA TAAACTTCaA GTTAACAACT GTGTTACAGT | 360 |
|    | AGAACCTGGT GTTTATATAG AAGGTTTGGG CGGTATAAGA ATAGAAGATG ATATTTTAAT | 420 |



AGCGTGTAAA ATGAGGAGGA AACTGAATGA TTTCGGTTAA TGATTTTAAA ACAGGTTTAA 540  
 CAATTTCTGT TGATAACGCT ATTTGGAAAG TTATAGACTT CCAACATGTA AAGCCTGGTA 600  
 5 AAGGTTTCAGC ATTCGTTTCGT TCAAAATTAC GTAATTTAAG AACTGGTGCA ATTCAAGAGA 660  
 AAACGTTTAG AGCTGGTGAA AAAGTTGAAC CAGCAATGaT TGaAAATCGT cGCATGCAAT 720  
 ATTTATATGC TGACGGAGAT AATCATGTAT TTATGGATAA TGAAAGCTTT GAACAAACAG 780  
 10 AACTTTCAAG TGATTACTTA AAAGAAGAAT TGAATTACTT AAAAGAAGGT ATGGAAGTAC 840  
 AAATTCAAAC ATACGAAGGT GaAACTATCG GTGTTGAATT ACCTAAACT GTTGAATTAA 900  
 CAGTAACTGA AACAGAACCT GGTATTAAAG GTGATACTGC AACTGGTGCC ACTaAATCGG 960  
 15 CAACTGTTGA AACTGGTTAT ACATTAAATG TACCTTTATT TGTAACGAA GGTGACGTTT 1020  
 TAATTATCAA CACTGGTGAT GGAAGCTACA TTTCAAGAGG ATAATCTCTA ATTTGTTAAC 1080  
 20 AAATAGCTTG TATTCACTAT ACTGATTTAA CGTAAGAnAT TCTAAATAAG TCTCATAAAG 1140  
 CTATTGCCTA AAATGATTAT AGGTTATATG CTGATATGAG GCTTTTTATT TTAAAAATAA 1200  
 TTTTAAAAAT ATAAAACGAA TCGTC 1225

25 (2) INFORMATION FOR SEQ ID NO: 755:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1265 base pairs  
 (B) TYPE: nucleic acid  
 30 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 755:

ACAAACAAAT CACTTAGTTA AAATTGACAG TGCATTATAT TCCGATAAAT TATTCAACAT 60  
 TGTAGAAAnn AGAATTGATA CACCAGATAT TGGCTATAAT ACAGTGGTTT TATCAGAAAA 120  
 40 ATGAGTGTAG AAATTAAAGG GATACCTGAn GTGTTGAATA AATTAGAATC GGTATACGGT 180  
 AAACAAGCAA TGCAGGCTAA GAGTGATAAA GCTTTAAATG AAGCATCTGA ATTTTTTATA 240  
 AAGGCTTTAA AGAAAGAGTT CGAGAGCTTT AAAGATACGG GTGCCAGTAT AGAAGAAATG 300  
 45 ACTAAATCTA AGCCTTATAC AAAAGTTGGT AGTCAAGAAA GGGCTGTTTT AATTGAATGG 360  
 GTAGGTCCTA TGAATCGCAA AAACATTATT CACTTGAATG AACATGGTTA TACAAGAGAT 420  
 GGAAAAAAT ATACACCAAG AGGTTTTGGA GTTATTGCAA AAACATTAGC TGCTAGCGAA 480  
 50 CGTAAGTATA GAGAAATTAT AAAAAAGGAG TTGGCCAGAT AAATGAATAT ATTAAACACC 540  
 ATAAAAGGAA TTTTATTATC TGATGCAGAG CTCAAAACAC ATATAAATTC TAGAATATAC 600

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TATGATTTGC CTTCAGACTT TATGTCTGAT AAATATCTCA GTGAAGAATA CTTAATTCAA 720  
 ATAGATGTAG AATCTTCAAA TAATCAGAAA ACAATTGATA TAACAAAACG AATAAGATAC 780  
 5 CTGTTATATC AACAAAATTT AATTCAAGCA TCTAGTCAGT TAGATGCTTA TTTTGAAGAA 840  
 ACTAAACGTT ATGTGATGTC GAGACGATAT CAAGGCATAC CCAAAAATAT ATATTATAAA 900  
 AATCAGCGCA TCGAATAGGT GTGCTTTTTA ATTTTAAAGG AGGAAATAAG CAATGGCAGA 960  
 10 AGGACAAGGT TCTTATAAAG TAGGTTTAA AAGATTATAC GTTGGAGTTT TTAACCCAGA 1020  
 AGCAACAAAA GTAGTTAAAC GCATGACATG GGAAGATGAA AAAGGTGGTA CAGTTGACCT 1080  
 15 AAATATCACA GGTTTAGCAC CAGATTTAGT AGATATGTTT GCATCTAACA AACGTGTATG 1140  
 GATGaAAAA CAAGGTACTA ATGAAaGTTA AGTCcTGaCA TGaGTaTTTT CaATATTCCa 1200  
 AGTgATgATt TAAaCACaGT TaTTGgACGT ACTAAAGATA AAAATGGGTA CATCTTGGGT 1260  
 20 AGGAG 1265

(2) INFORMATION FOR SEQ ID NO: 756:

(i) SEQUENCE CHARACTERISTICS:  
 25 (A) LENGTH: 1111 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 756:

CATATACCCG GGTCCAAGA ATCCTCTATC CATATGGTCC CCCAATTTTG ATTCCACCAT 60  
 35 ATGTGTTAAAT ATCACTTTCC CAGCCTACTT TTTTATnCAG TTGGGCTCTC TAAAATTGTT 120  
 TTGAAATCCA GGTGGAACAT ATTTCCAGTG TATGACCAAT CGAAACATTT GCACCAATAA 180  
 GGCGCCAAT TTTTCCTGTA TCATCACCAG TAACATTACC GTTGAATCCA TAAGTTAAAG 240  
 40 TACTCATATA CTCTTTTGTA TCAATCGAAT TTCTTGGATA GTAATCAGAT ATTTGAGCTA 300  
 CTTCAATTATC AGGTAGTTGC AACTGTACCT TAAAGGCTGA AGGCCAGGCT AAACCACTTT 360  
 TGTTAGCACC TTCTTCGCTA TAAACTCTAT ATTGACCAGC AATGGTACCT TTCGTTCTAA 420  
 45 TAACTAGCAG TTTTnTATTA TGATTTTnTAT CATCGATAAA ACTATAAAAT ACTTTTTTGT 480  
 GCATGCCATT TTCTTTATCA TAAGTACTA AATCACCTGT TTTTACTGTA GTATTGCTTC 540  
 CAATATCTGT AGTACCGTT TTAATATTAA TATCAGAATC TGCGGCATTA GCGACAGGAT 600  
 50 TCATTAATAT GGAACCTAGC AATAGTGTG TTGTTACTGA GCTGACTATA CGTGTnTTCA 660  
 TTTTCATCAT CCTTCTATTT TTTAAACGA TTTGAGGAAA CAATAATCAA TATGTCAATT 720

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GTAGCAACTG ATAAATTACT GAGTGATGAT GAGTGATTAT TTAAAGAATA TGTTTTTAAAC 840  
 TTTTATTTAA AATTTGAAAG GAAGCATTTC AATTTGAGG GTTAGTCAAA GTTGAATAAA 900  
 5 TTCTTTATGA AACAAAGGAAA AGACATAGCT AATTTtATTG ATTAATTTCT TTAAAACTAA 960  
 TGATTTGTTT GATTTAAAAA TGTAATCGAT TACAATATAA AAATACAAAT ATCTTAGAAT 1020  
 TAAATCAATT AATTAACAT TAAATAAAAA TTAACATAT ATTAACATAGT GTAAATTAAT 1080  
 10 AAATAGAAAT AGAGAAAAAG GGTATTAATT A 1111

(2) INFORMATION FOR SEQ ID NO: 757:

15 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 466 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 757:

TATCTATTGT ATGTAACAAT AGGTACATAA TATTTTTAGG GTGGGTATA TGAGCATAAT 60  
 25 TACAAGATTG TTTAATAACA GTGATTTTGA AAAATTAAAT CAACTATGTA AATTATATGA 120  
 TGATCTAGGT TATCCAACAA ATGAGAATGA TTTAAAAAAG AGACTAAAGA AAATAACGAA 180  
 TCATGATGAT TACTTCCTAC TGCTTTTGAT AAAAGAAAAT AAAATAATTG GTTTAAGTGG 240  
 30 TATGTGTAAT ATGATGTTTT ACGAAwAAA TGCAGAGTAT ATGAGAATCC TTGCGTTTGT 300  
 TATACATTCT GAATTTAGGA AAAAGGTTA TGGAAAGAGA TTATTAGCTG ATTCTGAAGA 360  
 ATTTTCTAAA CGGTTGAATT GTAAAGcMAT AaCACTAAAT AGTGGTAATA GAGATGAnAG 420  
 35 ACATCTGCAC ATAACTATA TAGTGATAnT GGGTATGTTA GCAATA 466

(2) INFORMATION FOR SEQ ID NO: 758:

40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 402 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 758:

CGTACAGCAT AACCAAATAC ATATCTGCCA AAATCGCCAT ATGCCCCAGT TCCTCTTCCA 60  
 50 TATTCCGTTG TCATTGAGTT TTTAATTTTA TCGATAGAAA AATGTAAATG GCTATCTAAT 120  
 TTGTTTTTTA AAGATTTTAT GTAATCtCTA TATTTAAATT CGAATATTCT TTTTATACC 180

55

AACTAATATA TwCAATTGTA TGCCTAGCAT AATCTCTCAT TAAAATATGA GGATATACCA 300  
 TTTCTTTATC AAATATtTCT TCATAAATAT AATTAGCAAT CTCTATATGT ATTtCACAAA 360  
 5 TGTCGATTcG AAGTGTCGCC CCTAAAACAG rAGCATATAA TC 402

(2) INFORMATION FOR SEQ ID NO: 759:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 338 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 759:

AAGTTACTCA ACAGCCATTT GACACGTCTC GATTAGAGCG ATTAGGTATA ACCGAGCGCC 60  
 20 AAATAAAGA CATGTATCGT TTATTAGGAC TAGCCAAATA TGAAGATCGA TTTGTTATTC 120  
 CAACATCACA CAAAGAAACC TATTTAGATA CGTATCACGC ACAAGGTAGT ACAGGATACA 180  
 ATTACGGCGG CGAGCATTTT GGAGATAACT GTGAAGGCTG TGGCGTTGCA GTAGGTTcAG 240  
 25 GGAAAACTGG TCAAGAAATT TATAATGGAG AATTCTATGG AGGGATTtCC GTGGTTAATT 300  
 TCGATAATTT AAAAAATATC CAAGAAAGTT TGGGTnnn 338

(2) INFORMATION FOR SEQ ID NO: 760:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 760:

CTCTATTATA TTTAGAGTTA TAGCTATTGC aGTTGTTTAT TTATTGAAAA TAAATGTACT 60  
 40 ATCATTAGtT TTAGCAAGTG TATTAGGCAG TTTgGTATCt AGGCTACTAT TATCTATTAT 120  
 TTTAAATTTA CCTGTGTGGG TAGTGTGTGTT AAaCGCGATT CCAGGCGTAA TATTCACTTT 180  
 45 AATTGTAGcT ATTCCTTTAT ATCTCACATT GAGAAAAAGA ATGGCAGTAT TACTAAGATA 240  
 ATAAATCAAA ACACGGTCGT CACAATTACT GTTGCGCACC GTGTTTTACT AGCTATTTAT 300  
 TGTTTTcAGT TTCTTTTGTA TCTAACAATT TCACTTTGTG ATTTTCCCAA TCAATTTcAT 360  
 50 ATGTTGaTTT AAATGTTCTA GTTTTAAAGT TTTTATAAT 399

(2) INFORMATION FOR SEQ ID NO: 761:

(A) LENGTH: 639 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 761:

|    |                                                                    |     |
|----|--------------------------------------------------------------------|-----|
| 10 | GCATATnCAA AACAAATAGCT GCTTTAGGTG CGGGGGCTAT TAGCGTTATT TCTGCACTAA | 60  |
|    | CAGGAGGTTT AGTTGGCGCA GGTGTTGGTG GTTTCCTTGG ATCTATAGCT GCATCGAATA  | 120 |
|    | TTGATACTAG TAAGGGAATA TATATAAAAT TAAAACTAA AAAGTATGCA GCCGGGGAAT   | 180 |
| 15 | ACGTTCTGAC AGGAGAAAAA TGGGGATATC AGTAAGGGTG ATTTTATGGA TAGATTAAAA  | 240 |
|    | TATTCACTTA AAGTTGGAAT TTTAGCATTA TTATTATTTT GTACTTTAAA TTATTTAGTT  | 300 |
|    | CCAATGCAAA GCAATGCTTT TTCAATAATT ATATATTCGG CAATTTTTCG TGTGTTACTT  | 360 |
| 20 | ATGCTTTTAG TTTATATATT TTTAGGAATT TTAAGAAAT GACATGAAAC AAATTAGCAT   | 420 |
|    | TGGCTATGAA GAAATCTATG GGGATAGAAT TTTTCATAGC CATTTTTTAA AAGAGCATGA  | 480 |
|    | AGTAAAAAAT TGGAAAACCG TCAATCAAAT AATTGAAAAA GAACACTTGG ACAAAAATGA  | 540 |
| 25 | ATATGnAAGC GGAACCGCCG TTATTTTCT TTTGCAGGAT CGTTAGATTA GATTnCGGTT   | 600 |
|    | GTATAGTATA ATGAAAAATA TTATAATAAA TTTATAAAA                         | 639 |

30 (2) INFORMATION FOR SEQ ID NO: 762:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 852 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 762:

|    |                                                                   |     |
|----|-------------------------------------------------------------------|-----|
| 40 | nTGTTCTTG TCTGGATCCA ACGTAAACAG TCGCTTCATC TAATACAATG ATAGGCGCAT  | 60  |
|    | CTTTTAATAT CATTCCTGCA ATAGTGACTC GTTGTTCCTC ACCACCAGAC AATTTATCTC | 120 |
| 45 | CCACTGTACC AACATTCGTA TCATATCCAT CTGGCAACTT TTCAATAAAT TCATGACATT | 180 |
|    | GTGCTAACTT GGcAGCTTTT TCAACTGCCT CATCCGTAGC TTCTGGATTG CCAAGTTTAA | 240 |
|    | TATTTTCTTT AAAAGTAAGA TTTAATAAAA AGTTATCTTG TCCAACAAAA CCAACTAAAT | 300 |
| 50 | CGTTAAGTTG TTTGATTCA ATATCTTTTA TATTTATACC GCCAATCGTA ATTTACCTG   | 360 |
|    | AAGTCACATC CCAGTATCGT GATATAAGCT TGGCAATGGT TGACTTACCG CTACCAGaTG | 420 |
|    | CCCCGACGAT AGCTGTGAAA TTATTTTCTG GTACTGTAAA TGATAAATGC TTAAAGACCA | 480 |

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GAGGCTTCTT AAATTTTGTT GACAATACTA ACTCTTCTAG ACTTAATATT TGATTCACTT 600  
 CAGTTAATGC GTATTGTATA GACTTTAAAT GATTTACATA ATTAGTAAAA TTCTTAATCG 660  
 5 GTGCTACTAC ACCTAAAGAT AATACGATGC ATAGGAAAAA TTCCGCATAG TTTAATTGGT 720  
 TGATAGATAT CAAATACATG CCGACCGGTA AAATCCCTAA AAATGTTGAA GGTAATACAC 780  
 10 TAGCTCCTAA ATTCATATAC CCCCATGTAT TTTTAAACCA ATTCAAAGTG TGAATCTTAT 840  
 AATTATCTAC TG 852

(2) INFORMATION FOR SEQ ID NO: 763:

15 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 852 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 763:

25 CTCTTCATGC GTCATACGTT GTGTCGATTG ATCAGTTGTT TTGTCTAAAT CACTAGCTTT 60  
 AAATTTAGAT TGATTTGATT GACGTGTCGT AAATnGTTGT TCCTTTTGTT GCGGTTTGCC 120  
 TTTTTTCTT GATCTTATTA AAAATAAATT GATAACCCCA ACAATAATGA GCGCTAAAAT 180  
 30 AATGTAGCTA ATAATGAAGG TCGTAGTCAT TTAATGACCC CCTTAATTTT TATGGATTTT 240  
 TACTTCAGCG TTCaTTCCaG GAACAACCTG TTTAGACGGT TcTGATTCTA GAGTGATTTT 300  
 AACAGGTATT ACTTGAGAAA CTTTAGTGTA GTTACCATCA CTATTTGATG ATGGCATTAA 360  
 35 TGAAAAGtTG CAGCAGTTGC TTTTCCAATA CTATCAACTT TACCTTTAAT AGAAGCTTTT 420  
 TGACCGTCAA TAGTCACATC AACATCTTTA CCTACTTCAA CATCTTTAAT ATCTTTTTCG 480  
 TCAATATTTG CTGTTACATA TAAATCATCT AAATTGTATG CATAAGCGAT TGGGTTACCA 540  
 40 GCTTGACCA TTGAACCTTC CATACCATCT AATTGCGCAA TTGTACCTTT TTGAGGCATT 600  
 TTAAGATCCA TATCTTTCGT TTCGCCATCT TGACCTTGTA CAGTAACAAT TGCTACTTTG 660  
 45 TCACCTTAT CGAGTTTGTC ACCTTGTTTA ACAITTAAGTG ATTTAATTTG TCCAGATGCA 720  
 GGACTTGCTA TTTTAATTTG ATCGCCATTT ACTTTTGCAT TATCAGTTGT TACATAGCTT 780  
 GTTGTTTTAT TCCAAAAATA AAAGCCAGCA ATCCCAATGG CTAACnGTAC AACAACCGTA 840  
 50 ATGACATTnA AT 852

(2) INFORMATION FOR SEQ ID NO: 764:

55 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 747 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 764:

|    |                                                                    |     |
|----|--------------------------------------------------------------------|-----|
|    | ACATATTCGA CATTCATTTT AAATTGCATA TAACTACATT AACCATTTCAT TGTGCAGCGC | 60  |
| 10 | CTGTTGTTTA GATGATCATT TATTGACTTT TTGCTCTTAT nCCAnGCAAT TTTTGTGATT  | 120 |
|    | ATTGCTTATA ATACATTTTA AGACAAATGT TTGTTTCAAC ATCGCATGCG ACATCATTAA  | 180 |
|    | yTATTCATTT AAATTTATCC AGTTTCTATT TGTCTGCAAT TGCTGAAAAT TAAAGGAGCT  | 240 |
| 15 | TATTTTTAAT AATGGAACAA ATTATCACTG AATTTATTAG CCGTTTGGG TATGCAGCCA   | 300 |
|    | TTTTTATATT AATTTkATka GAAAATGTAC TACCTaTCGT aCCATCGGgA AATTATTCTG  | 360 |
|    | ACATTTGCTG GTCTTATGTC TGTTAAATCA CATTATCAAA TTTTAACTTT ATTTATTATT  | 420 |
| 20 | GCAACTATCG CATCGTTTAT AGGGCTGTTA ATTTTATATT ATATCTGCCG TTTGATTTCa  | 480 |
|    | GAAGAACGTC TATATCGTTT TATTGATCGA CACGGTAAGT GGATTAAATT GAAAAGTAAG  | 540 |
| 25 | GATTTAAAGC GAGCAAATGA TTGGTTTAAA AAGTATGGCG TATGGGCTGT ATTkATCTGT  | 600 |
|    | CGTTTCATAC CTGTATTACG TGTAtTGATT ACCATTCCAG CTGGTGkaAA CCGCATGAAT  | 660 |
|    | GTGTGACaT TtACCGTTAT TTCATTAATA GGTACTACAA TCTGGAATTT CGGTTTAATT   | 720 |
| 30 | TTACTAGGAC GCACTTTGAG CGATAGC                                      | 747 |

(2) INFORMATION FOR SEQ ID NO: 765:

|    |                               |
|----|-------------------------------|
|    | (i) SEQUENCE CHARACTERISTICS: |
| 35 | (A) LENGTH: 820 base pairs    |
|    | (B) TYPE: nucleic acid        |
|    | (C) STRANDEDNESS: double      |
|    | (D) TOPOLOGY: linear          |

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 765:

|    |                                                                   |     |
|----|-------------------------------------------------------------------|-----|
|    | TTTACCTTTT AACCAATCAT GCATTAATGC AATGTGTACT GTCTTAACAA ATGTTGCATA | 60  |
| 45 | TtCATCTTCT GCACTCCACT TTTTCAATTC CTGTTGATTA ATGGCATGTT TTTCTCCATT | 120 |
|    | TTCCAACATA TTGACATACA ATTTATAATG TTTTTCAACT GCCTGAATAA AAGCGAGTTG | 180 |
|    | ATTTTTATTT AAATGTGATT TTAACTTTTC TAAATCTGAA TTAATAAAGT CTTCTATAGT | 240 |
| 50 | CGAATAAGAC ATATCTTGGT ATTCAACTAC TGCATTAATT TCATCTAATA ATTGCGATTG | 300 |
|    | TGATTTTAGC GTTATATAAC TCTCGTCTCC ATAAGATATT TCTGTAGTAG CTGCTGTAGT | 360 |
| 55 | AGGATTTGGA GAACTGACTA AAATATGCTC GCCTAATAAT GCATTTATCa AACTACTTTT | 420 |

TGTTCGTGG ATATCTTGCT TTGTACGCTT GAACAAAGGC ACATCCGAAA TTATATCAAG 540  
 CGCITTTTGA ATATCTATAG ACATATTTGT TGTAGCTGTA TTTTGATTTA GCTGCTGATT 600  
 5 ATCACGATTA TCCTGAGCAT TATCAGTAGC CACTTGATAT GTTGTCTCTT GTCGACCTAT 660  
 TAATTTATCT AGAGATTCAT CTAAATGAAT ATAGTAGTGA CGATAATTCT TAGTCGTCAA 720  
 TGA CTGACGC AGCTCATTTA ATTCTGTATA ACGTTGATAT TCTTTTAAAT CATCACTTTC 780  
 10 TTCTGTTGGn AATTCATCTG CCTGCACATT TTCTATnATT 820

(2) INFORMATION FOR SEQ ID NO: 766:

15 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 672 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 766:

TCAACATGAC ATTAATTTAA TAGCGATGCA TACAAATTTA GATGTAAATC CGTATGGTGT 60  
 25 CAATATGATG TTGGCGAAGG CGATGGGTTT GAAGAACATT TCAATAATAA ATAATCAACA 120  
 AGATGTATAC TATAAAGTTC AAACATATAT ACCTAAGGAT AATGTTGGAC CATTTAAAGA 180  
 30 TAAGCTTAGT GAAAAATGGAT TAGCGCAAGA AGGTAATTAT GAATATTGTT TCTTTGAAAG 240  
 TGAAGGAAGA GGGCAATTCA AACCAGTTGG TGAAGCTAAT CCAACAATAG GACAAATTGA 300  
 TAAAATTGAA TATGTAGATG AAGTTAAAAT TGAATTTATG ATAGATGCAT ATCAAAAAGTC 360  
 35 AAGGGcTGAG CaATTAATTA AACAAATACCA TCCATATGAA ACACCGGTAT TTGATTTTAT 420  
 TGAGATAAAA CAAACATCCC TTTATGGACT TGGCGTTATG GCAGAAGTGG ATAATCAAAT 480  
 GACATTGGAA GATTTGCGAG CTGATATTAA ATCTAAATTA AATATCCCAA GTGTCCGTTT 540  
 40 TGTTGGTGAK TCTAATCAGA AAATTAAACG TATTGcAATT ATTGGTgGTT CAGGTATTGG 600  
 ATATGAakAT CAAGctGTCC AACAAAGGcGC AGATGTCTgT TACGGTGATA TTAAACATCA 660  
 GATGCCTAGA TG 672

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(2) INFORMATION FOR SEQ ID NO: 767:

50 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 403 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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GAAAAAGTTA AACCTACTGT AACTACAACA AGcmaAGTTG AAGACmATCa CTCTACTAAA 60  
 GTTGTmAGTA CTGaCACAAC AAAAGATCAA ACTAAACaC AAACGTCTCA TACAGTTAAA 120  
 5 ACAGCACAAA CTGCTCAAGA AAAAAATAAA GTTCAAACAC CTGTTAAAGA TGTTGCAACA 180  
 GCGAAATCTG AAAGCAACAA TCAAGCTGTA AGTGATAATA AATCACAACA AACTAACAAA 240  
 10 GTTACAAAAC ATAACGAAAC GCCTAAACAA GCATCTAAAG CTAAAGAATT ACCAAAAACT 300  
 GGTTTAACTT CAGTTGATAA CTTTATTAGC AcAGTtGcCt TCGCAACACT TGCCCTTTTA 360  
 GGTTcATTAT CTTTATTACT TTTCAAAAGg AAGaaTCTAA ATA 403

15 (2) INFORMATION FOR SEQ ID NO: 768:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 483 base pairs  
 (B) TYPE: nucleic acid  
 20 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 768:

TTCAATGCTC GTTTTGCTTG CGTTAGTAAT TTCTAACATA TTCATTcACA TTTTGAGACC 60  
 TAAACTATCA ATCACCACtC AAATCATCAT CGTTTTGATT TTAATTGAAG CACTAATTGG 120  
 30 ACTGCGTTTC TTGAAGCGT ACGATGTTAA GCGTGGCAAA GATAAAGAAA ATAAGAAAAA 180  
 TAGTAAGGAT TTCGTTAAAC TAAAATCAAT TTTAGTAGCA ATTTTATTTA CATCATTGGC 240  
 GCTGACAGCA GGTACTGTAG CTGATATATA CGGTTTCACT GACTTAGGAA ATACTAGAAG 300  
 35 TGATTTAATC GTTTGAGCA TAGGTGGTAT TATATTGGC CTCGTATGTT ACACAATGGA 360  
 AGATAAAGA TAACGATAAG GAGCTGGCGA TTATAAGCT AGCTCCTTTT TTAACtTaTA 420  
 TATGTAAAGA aCTaTCCTAA GGGkTTTTTAA TCATATGTCA ATAATTTCTA TAATACATTA 480  
 40 TTA 483

(2) INFORMATION FOR SEQ ID NO: 769:

45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 769:

ATTATATGTC TGATGTATTT CATGTCGTTA AAAATAAAGG TACGGAAGAT TTAAAGAAG 60

55

GGATGATGCT TGAAGGTGAA AAAATCAAAG CTTTTTATGA AGATATGCCA CCGTATCAGA 180  
 CTGTCAAAAA AGGAACGATA CAAATTAAGC GTGATGGCAC ACCTATTATC CTATTAAATG 240  
 5 TCATTATACG CTnGTAGCTA CCCGCAAATC GGTACAATCG CAGTTATCAT TTACGAATTA 300  
 GCACAAAACC GCAGGATCAC GTTGAATTCC ATTATAGTAT TTACGGCTGA AGACTGTAAG 360  
 10 nTAnACTGGT AACCATATCA TGGATGATTG ATCATAGATG 400

(2) INFORMATION FOR SEQ ID NO: 770:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 750 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 770:

ATCTCTTCTA CTTCTTTTAC AAATTGAGAA CGTCTTAAAA TGGCTTTCAC ACGGGCAACA 60  
 ACTTCTCTAG GTkAAAAAGG CTTAGTCATA TAGTCATCGG CACCTAATTC TAAACCTAAT 120  
 25 ACCCGATCAA ATTCATCATT TTTCGCGGTT AACATTAATA TAGGGACTAA ATTTTTATTT 180  
 GTTCTTACAG TCTTACATAC GTCAATGCCA TCTTTTTTGTAG GTAGCATAAC ATCTAAAATA 240  
 ATTAAATCTG GCTGTTCACT TTCTACCTTT TCTAAAGCCT CATCACCATC AAATGCGACA 300  
 30 ACAACTTCaT AACCAGCTGk TTCTArGyTA TATTTAAGTA ATGgTTaCGa TTGaATGtTC 360  
 GTCATCTACT WCCaACACTT TTTGCGACAT GGtATGCCTC CCTAActtAk AATTATATTT 420  
 35 cATTATAACC GAACTATTTA TAAAAATAmC ATCCTACACA TTATCTTTAC ACATTTTTTTA 480  
 CATTACTTTA CATATAAATA AAATACTTCT TATATTTCTT TCTmTCATTT GCATGACTTA 540  
 CTCTGGGACA ACGAAATAAA TTTTGTAATA ATAGCATTTT TATCCCACTA CCTATGCATG 600  
 40 AGTTTTACTC ATTTATTCCT AAGCTTATGT ACATATTCGC TTTGTCTAAT GTGTAAGAAA 660  
 CACTACATAA TCAATCATTG GTGACTCTTT ATTATTTCTA TCCTGTTGCC AaCTTCAATT 720  
 CATTTAAAAA GCGGAACCTA GCAATTAAAG 750

(2) INFORMATION FOR SEQ ID NO: 771:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1462 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

|    |                                                                    |      |
|----|--------------------------------------------------------------------|------|
|    | ATTTAATTAT TATTTTCCA AATCAATACG ATATAATTTT ATGTTTTTAT CTTTGGTGC    | 60   |
|    | TGaGGCAAAT TGATAAGtCG TTTTGCCTTT TTCAATATAT CCAAAATTAC CAGCAACTTT  | 120  |
| 5  | GCTATATTCC GTATGTGTTA CTGCTTTGCC AACATAATTT TTAACAGCTT GATATGTTGG  | 180  |
|    | ACCATTAGCA TCATTATACA TCATTGAAAT ATGAGTTACT TTACCATTGT TTTTCTTACC  | 240  |
| 10 | ATCAGTAGTT ACTAATAACA TACCTTTTTT AGTATGGAAT TCGTAATAAT GTTCAGTTCC  | 300  |
|    | ATCTTCATTG TAAGAATACA TCGGATTTTT GTACTTAGTT AAAACATCTT TAATAGATTC  | 360  |
|    | GCCAATTTTC ACATTTTCTA ATGACTGATC ACCCTTAATT AATTGTTTAA CAGTATCAAT  | 420  |
| 15 | AGAGTTGCCA CTTGCTGCTT CGGCACTAGT GTTCACTAAG CCTACTCCCA TTACAACAGA  | 480  |
|    | ACATGCAATT ATACTTGCCG TTAGTAGCTT TTTCATAAGC ACTCTCTCCT TTTATTTATA  | 540  |
|    | TCGTCTTG TG CTCACAACCA TTATACAACA ATCATTTCTA AAACAACAGT CATATTACAA | 600  |
| 20 | TTATATTACA AATAATAATT ACTACTTTTA TATTTCACTT ATCACTAAAA ATTAAACATG  | 660  |
|    | CTTTTCATCG TGATGTTTGT TGATAAATGC AGCTGTATCT TCGACGAATC TTTCTTGCTC  | 720  |
|    | TTcAACAAAT GGGAAATGCAC TTGATTCTTG ATATACTTCA AAGTCCGCAT TTTGGATTAA | 780  |
| 25 | ATCAGCTACT TCTTTAGCTT CTAATCTTGT TGTCTTTTCA CCGAATTCTC CTGCAATAAT  | 840  |
|    | TTTTGTGGT ACTACGACAT TTCTATAAGT TTGAGAAATA TCAGCGTTTT TGAATACCTC   | 900  |
| 30 | TTTAAC TGCT TGAATTTCTT CTTTAGTTGA TATTTCAATT GTATCTACGA CATGTTTGAG | 960  |
|    | GAATCGATT C ATTTTCTCG GACGATAATA CTTACGCTTA TTAAAAAATT TAwCyTgtTT  | 1020 |
|    | TTCaGGATCC CaGTTtCGAA TAATATGGGC ATaTTTTCTA AATAAACGTT CTTCCGGTAA  | 1080 |
| 35 | TTCACCTTCA ATAGATGTTG GATTTACCAA CGTAAGTGAT GATGTAAATT CAGGATAACG  | 1140 |
|    | TACTGAAATA TCCGCACCAA TGATTCCACC CATTkCATGG cATACAAATG CAACTTCTTC  | 1200 |
|    | AATATATAAA TATTTAAGTA ATTCAACAAT GTCATCAGAA AAATCTTTTA TTTCAATGTG  | 1260 |
| 40 | ACGAGGTTTA TCAGAATAGC CATGTCCACG TAAATCAATT AACACAAC TT GAAATGATTT | 1320 |
|    | TGCTAATTCT GCTGCTAATT TATTAAACAC AGAATAATTA TCAAGTACAG TATGAATCAA  | 1380 |
|    | TACGATAGGA TAGCCTTCAC CTAAnGTACT GTAATGTATC GATGTTCCAT CTTTCTAGT   | 1440 |
| 45 | AAATAGATCC ATAATTTTCT CC                                           | 1462 |

(2) INFORMATION FOR SEQ ID NO: 772:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 704 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 772:

5 ATTATTATAA GGAGTTATCT TACATGTTAA ATCTTGAAAA CAAAACATAT GTCATCATGG 60  
 GAATCGCTAA TAAGCGTAGT ATTGCTTTTG GTGTCGCTAA AGTTTTAGAT CAATTmGGTG 120  
 CTAAATTAGT ATTTACTTAC CGTAAAGAAC GTAGCCGTAA AGAGCTTGAA AAATTATTAG 180  
 10 AACAAATTAAT TCAACCAGAA GCGCACTTAT ATCAAATTGA TGTTCAAAGC GATGAAGAGG 240  
 TTATTAATGG TTTTGAGCAA ATTGGTAAAG ATGTTGGCAA TATTGATGGT GTATATCATT 300  
 CAATCGCATT TGCTAATATG GAAGACTTAC GCGGACGCTT TTCTGAAACT TCACGTGAAG 360  
 15 GCTTCTTGTT AGCTCAAGAC ATTAGTTCTT ACTCATTAAC AATTGTGGCT CATGAAGCTA 420  
 AAAAATTAAT GCCAGAAGGT GGTAGCATTG TTGCAACAAC ATATTTAGGT GGCGAATTCG 480  
 CAGTTCAAAA CTATAATGTG ATGGGTGTTG CTAAAGCGAG CTTAGAAGCA AATGTTAAAT 540  
 20 ATTTAGCATT AGACTTAGGT CCAGATAATA TTCGCGTTAA TGCAATTTCA GCTAGTCCAA 600  
 TCCGTACATT AAGTGCAAAA GGTGTGGGTG GTTTCAATAC AATTCTTAAA AGAAATCGAA 660  
 GAGCGTGCAC CTTTTAAAAC CGTAATGTTG ATCCAGTAGA AGTA 704  
 25

## (2) INFORMATION FOR SEQ ID NO: 773:

## (i) SEQUENCE CHARACTERISTICS:

30 (A) LENGTH: 427 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 773:

35 GACCACGACA CCACAAGCTA TGAAGAATGC CyTTGTTAAG CCGCcTTTGa ATtGCATAGA 60  
 GATGAAAATA CCAATATTAA TAAAGAAGTT ACAGAAAATA CCTTTTGTAA AAATATTCAA 120  
 40 CCATGTTGAA TCAACAGTCT TTTTCTGAAC TAAAGCTGTT AAAGCTTGTG TCATTTTCAGG 180  
 TGTCATGACA TGCGCAAATT TCATTAAGAA AAATAACACA AACCCACCTA AAATATTTCC 240  
 45 TAAGAAACAA TATAATAAAA TCCAAGTCAT CTTCTTAACA GAAACGACTT TATAATACCA 300  
 GCCTACTGTA AAGTACATGA AGTTACTTGT TAATAATTCA GAGTTAGTTA ATACAACTAA 360  
 AATCAAACCT AAACATAACG CAATGGCTCC CATTAAATTG ATAAGTCCAT CTACGTGAGT 420  
 50 ACtCGCA 427

## (2) INFORMATION FOR SEQ ID NO: 774:

## (i) SEQUENCE CHARACTERISTICS:

55 (A) LENGTH: 400 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 774:

AGGTGAGCAT TATTAAATAT TGCCAAGAAA TCAAACTAA AAATATGCA AAAGATGTAG 60  
ATATATTATT TATTCTTGGC GGTGATGGCA CGGTAAACGA ACTTATAAAC GGTGTTATGA 120  
CACATGACCT TCAACTCCCT ATTGGCATT TACCAGGCGG TACTTTTAAT GATTTTACAA 180  
AAACGCTAAA TATAGCACCT GAATCATAAA CAAGCTAGTG AACAAATGGA TTTCTGCACA 240  
AGTTGGTACA TACGATGTAA TTGAAAATGA AATGAATCAA TATGCACTCA ACTTTGTGGG 300  
CTTAGGTCTC ATGTTCAAAA CGCGGAAAAC GTACAAGAGG TTCAAAAGAT GTATTGGGTA 360  
AATGGAGTTA TATTGGGTCC ACCGTCCAAA ACnCGGcNAA 400

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(2) INFORMATION FOR SEQ ID NO: 775:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 484 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 775:

AATTATTCCT CAATAGGAGC ATTACCCGCT CTCTCACCAA TTCCCAAAAA TGTAGTTTCT 60  
ATTTGCTTTG CACCATTAA AATGTCAGCT AATGTATTTG CAGTAGCCAA CCCTAGATCG 120  
TTATGACAAT GAGCAGAAAa AATTATGTTA GAATATTTTT TTACAAAGTA ATTAAAAATA 180  
TCTCCGTATT CTAATGGTGT CGAACATCCT ACAGTGTCGG CAAATGTAAC TGTTCCTAACT 240  
TGATATTTTG AAATAATTTC CATGTATTCT TTCAATTTTT CTCTAGAAGT CCTTGTTCCA 300  
TCTTCAAAAC AAATATCTAC TCCTTTTTTA TCTTCTTTA ATATATCCAA GCAGTCTTTG 360  
ATTTTCTGAA TATAATATTT ATTTGAAAAA TTAAGCTTTT CTTTATATG CAAGTCAGAT 420  
ATTGGCAATA GTATTTtTAC CACTAAATTA TGAATTTtCA ATtTGACTAT TTTTgGTATG 480  
TcNt 484

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(2) INFORMATION FOR SEQ ID NO: 776:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 788 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 776:

CGCAAGATGA AGTTAAAGAA CTTAATCGCT TATTAGGTAA AGTCATTCAT GCATTTGATG 60  
 5 AAACAAAGGA AAAATAATTA ACTTTTGTCA TGACAATTAA AGTAATGTTT AGAATTTATT 120  
 AAGAATAGAA AAACAATTAG CACGCGTAAC TTGTTAGTnA AAAAAGTCTGCT TGAAAGGTTT 180  
 CTTAGCCTAT CAAGCAGTTT TTTTATGCAT TATATTGAAT CATATTCCAT AAAGCACCTT 240  
 10 GATTAGCTAG TAATTGTTGA TAGTTTCCCT TTTCAACTAT TTTACCATTT ATCATCACAA 300  
 TGATGGTCTC AAAACGTGAC AATAAAGTTA AATCGTGTGT AGCAACAATT AATGTTTCTG 360  
 CATGTGCTTC AATTAAATCC ATAACCTTTA AACTATTTTG TTTATCTAAT GCAGTTGTTG 420  
 15 GTTCATCTAA AATCCATGTT GATGCAGTAT CTTTAAATAA CATCCTCGTA ATCGCTAAAC 480  
 GCTGAATTC TCCGCCAGAT AATGTATGAC CATCTAAGTC AATTTGACGT tCTAGTGCCA 540  
 20 AATGTTCTAA ATCTAATTGC TTAAATATTG CTTGCACCGC TTCATCTTTT TCATCGGTAA 600  
 ATAAATTTTG ACGTATTGTA CCATCAAATA ATTGTTGAGA TTGTAGCAAG ACATTTAACG 660  
 ATTCAAACTT ATCTTTGTcA TCTATTTCAA ACATATCCAT ATTTTCGAAA CGAACAGAGC 720  
 25 CACTATCTAA TTGATATAAC CCTGCCATAA TTTGTAGTAA TGTACTTTTT CCTGAACCAG 780  
 AAGGACCC 788

## (2) INFORMATION FOR SEQ ID NO: 777:

30 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1145 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 777:

40 TTACAAAAGA AATGCAACAA AATTTTTGAA TCATTACATT TTTTATAAA AATTTCACTT 60  
 TAGATTCACA ATAATTACTT ATTTTGTCAA TTTATTTAAT GTCAATATGT TGATTAATTA 120  
 ATAGTGTGT CTAATGTATA TAATATTTAG GTCATCGTTA TAGTCAACAA TAATAAGGTA 180  
 45 TTTCGAGTTG AAATTATCT TATTATTTTT CCACTTTTAC GTGCTATCCC ATTACACAAA 240  
 AACAAATAAG TAAAGATATT AAGTACAAAA AAGTGAACA CCTGTAGAT GCTCCACCTC 300  
 AATTATATTA AGTTATATTA TTTTGCTGCT TGGTATAATT CATCAACTTT TTTCCAGTTA 360  
 50 ACAATGTTCC AAAATGCAGT CATATAGTCT GGACGTTTAT TTTGATATTT CAGATAGTAG 420  
 GCATGCTCCC AAACATCAAA TAGTAAGATT GGTGTTTTGC CTTCTGTAA TGGATTATCT 480

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GATCCAAATA ATGTTGTTGC TTTATTTGCA AATTCATTTT TAAATTCATC TAAAGTGCCC 600  
 CACTGCGcTT TGATGTCATC TATTACGCCA CCTTTTCTT CAGAATTAGG TGATAGTATT 660  
 5 TCCCAGAATA ATGAATGGTT AAAATGACCA CCGCCATTAT TACGGACTGA CATCCTCATC 720  
 GCTTCCGGTA CCTTGTCTAA GThAGCAATC ATATCCGCTA GTGATTGATG CTCTAACTCT 780  
 GTTCCTTCAA CTGTTGCGTT TAATTTGCTC ACGTACGTAT TGTGATGTTT GTCGTGATGA 840  
 10 AACTCCATTG TTCTTTGATC TATATATGGT TCCAATGCAT CATATGCATA TGGTAAATTT 900  
 GGTAATTTAA ATGCCATAAG TATATTCCTC CTTTTATGAA TATACTTTTA TAATAATTAA 960  
 TTTTGGGTGT GTTTTGCAAT AATTATTATT TATTGTATT ATCCAATTAT ATAAAATTTA 1020  
 15 AATATTCGAA ATTGATATAA TATTTAATAT TGAATGCAAA AAGGCATTTA ACTGCTTTTG 1080  
 TTTCCCGCTT TTAAAGAGAA TTAAAAAGA CAACTTCCAT TTTTCAATAA GAAATTGCCT 1140  
 20 TTTCT 1145

(2) INFORMATION FOR SEQ ID NO: 778:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 902 base pairs  
 25 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 778:

AAAAGAGGnC CAATATTATC AATATACGGC CGGAAGATTC CCTTTTCTT CTCCACTTAC 60  
 TAAGCCCATC AATGGTGTAT GTTATCaATT GGTGCTATCC GCATTAAATA ATTATCTTCA 120  
 35 ATTGTGGTAT CAAAGCTATT CGCTTTTCT CCAATAATGT CTTTACCATA TTTATTGAAT 180  
 GCACCTACTA AAATCAACAT AAATGGAATT AACAAGGTTA CTACAATTGC CATTCTTATA 240  
 40 AATTGTGGTA TATAAGAAGG TCGCCAATTT AAAGCTTTAA TACCTTCTTW TCTAAATGGA 300  
 GTTCTATAA AGCGATATGA TAGCTCTGCA AATATAATTG TTAAACTTAT ATCTATAAAG 360  
 TACACATATA CAGGTATCTG TCCGTCTACA TAGTAATAT GTACGAAACT AATTACTGCA 420  
 45 AAATGCCATA AATATAAACT ATAAGACCTT TTCCGATAA ATACTAACAC TGGATTTGAA 480  
 AATATCTTCG CtATCCATGT AGATGGATGA ACGACACTAG CAATAATAAA TAACGTTAAT 540  
 ATGGATATTA AATAGAAACC ACCATCATAT ATCCAATTCG TCTCATCATT AATAATGAAA 600  
 50 AATAATAATA TAAGTACTAT AAATGATAAA CTACCTATGC TATCAATAAC ATATTTTACA 660  
 ACTTTAGGTG GATCATTTTT CAATTTAAAC GGTGGCCATA AAAAAGCTAA AATAACACCC 720

55

ATACTATAGA TAAACATCAT TAACCCTAAA GAAATTATTG ATACTCCCCA AAAAATAAAT 840  
 CCTATTTTGT ATCGCTTTTT AATTGTAAAC AATAATGTAA CCAAATAAC TGGGAAAAAT 900  
 5 AT 902

(2) INFORMATION FOR SEQ ID NO: 779:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 779:

GGAATTAGTT TCCTAATGAT CAAACCATAA CCATTAGCTT TTAATGATGT TACGCCTTTA 60  
 20 AAGATTAGAG GATGATGACT AATAATAGTA TTATAACCTT TTTCGATTGC TTCATTTACT 120  
 ACTTCCAACG TACAGTCTAA TGCTGTAAAA ACACCAGTAA CTTCAACATC TTCATCACCT 180  
 ATTAACAATC CTACATTATC CCAAGATTCA GCAGTACTAA ATGGCACATG ATGATCTAAC 240  
 25 AATGTCATTA AATCAGCTAT TTTCATaCTA TAACACCCTT TCAATTACaG CAATTTTCGTC 300  
 aTTAATTTGa GCTAAAcGTT GakGakGTTG TTCAGTAWTG AGtTTCGaTT TAAtATGATA 360  
 AAgTGCyTcT AACTCtCTTT GcCATTTtTT TATAAAATAT 400

30 (2) INFORMATION FOR SEQ ID NO: 780:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 557 base pairs  
 35 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 780:

GTTCCCTGTTT TAACATCAAT ATCTATCTTT TTAATATCTT GAACATAAAG CAGATTCAGT 60  
 TGGCTAATAT TTGAATTTAT GTTAATCACT TTTTTCGTTT CATTTTTAAA ATGTACTGTG 120  
 45 TAAGTnGCTT TTTTTCGATA TTTTAATTCA CGTCCCCGA TACCTCTATC ATGCTTCAAT 180  
 ACTGaTTTAA CTTTTTTAGA GATATCTTTG TAGCCTACAC GTGGGTCACC TGTAATTTT 240  
 AAATCTGaTA AAATTGGTGT TGATGTGCCA TTTACTGCAA TTGTGTATGG TACATATCTG 300  
 50 TCTGCTTTTCG CTTTAGTTCC TGTTTTAACA GTAATTTCAA TTCTCTTAAC ATCTTTTCGCA 360  
 TGAACCTAAGT TTGCTGTGTA ATTTTTTGAA TTCAACTGTA AGATTCCTTTT ACCACCATTT 420

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CTATCATGCT TCAGTACTGA TTTTATTGA CTAGTTAAAT TTTTGTAATT TGTCCAAGGT 540  
 TTATnTGAAA ATGAAAG 557

5 (2) INFORMATION FOR SEQ ID NO: 781:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 475 base pairs  
 (B) TYPE: nucleic acid  
 10 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 781:

TTCTGATAAC ACAACTTTCT TGGACCAAGT GACAATGGTA AAGTTGATAT TCTCAAAAAA 60  
 TATATTTTAT TGAAAAGGTA ACTATATCGA CCGCTCTGTG CGACTTGCTG TGTAGAAACA 120  
 20 TCAAGCCCAG CTTGAAACTT CATATAAACT AATAACTTTT GATAAATGCT ATTCCCAATT 180  
 TGTTCACTACT GCTCCAAGTT ATCATTAATT CTAAATTTAA TACTTACTTC ATTTTAACT 240  
 GGAATAAAAT GTACATCACT CGCTTTCATT TCTATCGCTT TATTAATTAT TTCTTGAAAT 300  
 25 AGAATCTTCA AAAAAACACC TCCTACATAT AATCACGTAG GAGGTGTTTT TATTACTTCA 360  
 ATTTAACCGT GTAAAAATGG ATTTAATTGT TCATCATCAA CCGTCGTATA TGGACCATGT 420  
 CCAGGGAATA AAGGTAAATC GCCTTCTAAT TCAAATATTT TATCTTGAAT AGAAT 475

30 (2) INFORMATION FOR SEQ ID NO: 782:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 35 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 782:

ATGAATATCG GTGCAGGACG TATCGTTTAT CAAAGTTTAA CTCGAATCAA TAAATCAATT 60  
 GAAGACGGTG ATTTCCTTTGA AAATGATGTT TTAAATAATG CAATTGCACA CGTGAATTCA 120  
 45 CATGATTACG CGTTACACAT CTTTGGTTTA TTGTCTGACG GTGGTGTACA CAGTCATTAC 180  
 AAACATTTAT TTGCTTTGTT AGAACTTGCT AAAAAACAAG GnGTTGAAAA AGTTTACGTA 240  
 CACGCATTTT TAGATGGCCG TGACGTAGAT CAAAAATCCG CTTTGAAATA CATCGAAGAG 300  
 50 ACTGAAGCTA AATCCATGAA TnAGGGCATn GGCCATTGTC ACCGGGGCCT GGCCGTAATA 360  
 AGCCAAngGA CCGGGCCAAC CGTTGGGACC GGAAGAAAA 400

55

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 810 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 783:

```

10  GATTAATGTA CTCGTGTACA TAACGTTTGA AGTATGATAA ATAGATATAG AAATAAAGTC      60
    ATATGTGACA TCAATTAAAT GATGTTCAAA TGACAAGATA CAATAGAGGA ATGTTTGTAA      120
15  TAnAAACGCT TCATATAAAG GTCGAGTCAA TATATGATAC GACTTTATAT GAAGCGTTTT      180
    ATTTGCTATG AGCTAGTATA TTTTATAATA ATTTTCTAT TTCTCTTTCG ATTTGAACAG      240
    GTTTTTTTTG AGGTGCAAAT CGTTTAACAA CGTTACCyTC GCGATCCACT AAAAACTTAG      300
20  TGAAATTCCA TTTGATTTTC TCATTAAAGA ATCCGTGTTG TGCCGCAGTC AAATATCTAA      360
    ATAAAGGTAA TTGATGTTCC CCTTTTACGT CTATTTTGTG ATGCATAGGG AAGGTAACAC      420
    CATAGTTTAA TTTACAGTTT TGAGCTGCTT CTTCGCCTGA ACCAGGTTCT TGGCCACCAA      480
25  ATTGATTACA AGGGAAACCT AGAATTACAA ACCCTTGATC TTTGTATTTC TCGTATAATG      540
    ATTGCAAACC TTCAAATTGT GAAGTAAAGC CACATTCGCT AGCTGTATTA ACAATTAGCA      600
    TAACGTCACC CTTATATGCA TCTAATTTGT AAGTAACACC TTTATTTGTT TCTACTACAA      660
30  AATCATAAAT TGTCTCCATT GTATCATCCT TTCGATTTAC TTAAaATGTA CCaCAAAATC      720
    GTGTAAtAGT CTkTACTArA ACTCTATGAT AGAATACTTT GAGTAGGATT TTATTAAGGA      780
35  GATGTATAAC ATGGnTCAGC AACAAATTCA      810
  
```

(2) INFORMATION FOR SEQ ID NO: 784:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 788 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 784:

```

    AAATTCATTG CAGAAAACAT AGATAAATAA ACAAATTGAC TTAAACGAG CGTTGCAACA      60
50  TATCTCGAAT TGTAAGGAG CTTGAAAATG AATAAAATA TAGTCATTAA AAGCATGGCA      120
    GCATTAGCCA TTCTAACCTC AGTAACTGGA ATAAATGCTG CAGTCGTTGA AGAGACACAA      180
    CAAATAGCAA ATGCAGAGAA GAATGTTACG CAAGTTAAAG ATACAAATAT TTTTCCATAT      240
55
  
```

ACCAATAAAC ATGTATCAAA AGATTATAAA GTTGGCGATA GAATTACTGC CCATCCAAAC 360  
 GGTGACAAAG GAAATGGTGG TATATATAAA ATTAAAAGCA TTTCTGATTA TCCGGGTGAT 420  
 5 GAAGACATCT CTGTCATGAA TATTGAAGAA CAAGCAGTCG AACGTGGACC AAAAGGCTTT 480  
 AATTTTAAATG AAAATGTCCA AGCATTCAAT TTTGCGAAAG ATGCTAAAGT TGATGACAAA 540  
 10 ATTAAAGTTA TTGGTTACCC ATTACCTGCT CAAAATAGTT TTAAACAGTT TGAATCTACA 600  
 GGAAGTATAA AAAGAATsAA AGACAATATT TTAATTTTGG GATGCCATAC ATTGGAACCC 660  
 GGGGAATTCA GGGATCACCA GTTCTAAATT CTAACAATGA GGTTCATAGGT GTGGTGGTAT 720  
 15 GGGCGGGTAT TGGGAAAAAT TGGGTTCTGG AATAATAATG GGTGGCCGTA TACTTTACGC 780  
 CTCCAnAT 788

## (2) INFORMATION FOR SEQ ID NO: 785:

- 20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1023 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 785:

30 CAATATTTTA GAAACAaTAA TTAAGTTCG ATGAACAAAC TATTAACAAT AATCTTGAGT 60  
 ATTATATTTA TCTTAATTAA TAATATATTT ATTTAAGATT ATGTTACTTC CAACTTTCAA 120  
 AGTAGAAAAA CGGTATAATT TGTTCATGGG TGTTCATGTA TAACTGCAA AAAATACAGC 180  
 35 CTACAACCAC ATAGATTGTA GACTATATTT AAAATAATAG GTATTTATCA TATCTCGTAA 240  
 ACTTAGTGCC AATTTTTTATA CTCGTGGTGC TGGTAAGCTA CCCTTAAATT CAGGAACGTA 300  
 GTGTGTaGGG CTATAACTTG GAACAGCATA TTGATAATTT ACATTTTTGA TATTTAATGA 360  
 40 TGGTTTCCCA ATTTTATAAC CATTTGATTG TGAAGATGAG AAATAkTTCT TCACACCTTT 420  
 AACTACTTTA TAAGAATAGA AGTATTTATA GTCATATGCT TTATTTACTT TAGCATTTTG 480  
 45 ATGTGTGCT GTTGTGTTAT TTTGGAACT TGGTACATGC ATACGATGTG AATTGTGACC 540  
 ATATGGTGGA ATTACCTTGA AACTATTTAT TTGTGGCACA ACACAAAAGT GATTAATTTT 600  
 AATGCTAGCA TGCCCTGGTG TAACAAATTT ATGCGCGTGA TATCCAGGAA CTGCAAAATG 660  
 50 ATGCTTGATA ATTAAAGATT gAGATGGATG TGTATATCTA GGCGATTCTG ATGGTTTAAC 720  
 AATAAAGTGT TTATTAATAG AATCCTTTGC ATGATTTACA TGTTTATGTA CATGTGTTGA 780  
 55 TTTGTATGAA GTAATAACTT TCTTGTAGTG GGTTCGCGTA GTAATGAAGT GGTGGTTTAC 840

TTGTTGTGAA GCTGGATTGT TTGTTGCTAC ATTCACGCGA TTATTGATTT CTTTGTACTC 960  
 TGGCACAATG TTTCTTAACT TTGATTCTGG nACGACAAAG TTTTATCTA CAATTTTACT 1020  
 5 AGC 1023

(2) INFORMATION FOR SEQ ID NO: 786:

10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 487 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 786:

TCAAGTTTAT TCGCTTGTG GAAAGCTTTA ACTTGATTTT CTAAAGCTTT ATCAAATTGC 60  
 20 GTTGATTCAT TATCAACTTT ATAACCTAAA GCTGATAAAC CAATTTTAAT AGTTTTAATA 120  
 TTTTATCAT CGTCTCCAAC TTAAATGTT TTCGTATTAG GAATGACATT TAAAGATTGA 180  
 TATTTAGGTG TGTC AATAGT AACGTCTGGT TTAATGCCTT TACCGTGAAT ATAATGACCA 240  
 25 TCTGGCGTTA ACCATTTTCAT TTCAGTATAT TTTAACAATG AACCATCCTT AAACCTCTCTT 300  
 GTAGTTTGTA CGACACCTTT GCCGAATGTT TTTGACCCAT AAACCTTTAGC TTTATTATAG 360  
 TCTTTTAGCG CACCAGTAAA CACTTCAGAA GCGCTAGcTG AACCTTCATT CACTAAGATG 420  
 30 GATATATCCA TGTCTTTTCG TTCTTTTAAAC GCATCATTAG AAGTtGAATT GCTCAGTACT 480  
 TTACCTT 487

35 (2) INFORMATION FOR SEQ ID NO: 787:

40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 803 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 787:

GnAAACnATA TTTAnAATTA AGTGTTTCGAT TTGCAGTAAA TTCATACAGA AAAGCTAAAA 60  
 TTAAAATGAT ACaGTGGAAT AATGTCACAT TCTCCATAAA TAATTGACCG AAGAAGCATA 120  
 50 AAACATAGAA TAGTACAGTA ACACTTACCG GCTGCTTTTC TTTATATATA ATTGCATTAA 180  
 TACAATAATA AATAATAAAG AGTGAAATTA GTGTTGATGT CGCATAATTA TAAAATCCTG 240  
 CAAACCAGCC ATATGTATCT GCATAAATAG CACTTGGTAA AATTAACATT AAAGAAAATG 300

55

TGCCCATACT AATGAGGCCA TATGAAAGCC AACGTAACCA GCTTACATGT ACAGCTATAA 420  
 TTTCAAAGAT ATTTCCGATA TAGCGACCAT TAAGTGATGC AAATCCTACT TTTAAAATAT 480  
 5 CAGTATTATA ATTGCTAAAC CATTGTAAAT CATCGTGCAT GAGTGGTAGT AAGATACCCA 540  
 TAAAAGTATA AAACAATAAT ATCGCAATTA ATATCAAAGT TGTCTTGTGT AATTGAATTG 600  
 TTTTCACTTT GCTAATCCTC AAATCTAGTT AAATTTTCCT CAACTTGTAG GTCGAAAAAT 660  
 10 TAATTCAATA TTTTAAATGT ATTTCTAATT TTCACCTATG CATGTTTCCT CAATCAAATT 720  
 AGATAAACAA GGTATTTAAT ATTACTTTCA ACAATTTATC TAAATCGCCC CTCGTCTTTT 780  
 15 TCTATGaCGA ATGATTACAC TTG 803

(2) INFORMATION FOR SEQ ID NO: 788:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 20 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 788:

GAAAAGTTGT ATTATGAATA AAGTTAATCA AGGTGCTCAG GAAGAGGCAA TGGAAGAGTT 60  
 ATTAGTGACT TTTCAAAAAT TGATTAAAGA CTAAGGAGT TTAAGATGAT ACATCAAAAT 120  
 30 ACGATTTACA CAGCGGAAT TGAAACAGAA GAACAAGTAA GTCAATTGAC AGAACGCATT 180  
 TCAAATATGA TAGGTGTTCA TCAAGTGAAT ATTAATATAA TAGATGGTCA AGTAACTGTA 240  
 TCGTATGAGA CACCAGCAAA TTTGAATAGT ATTGAAAAAG AAATCTATGA TGAAGGATAC 300  
 35 AAAATTGTAT TTTAGGGTAT AATGTAGAGT GCGCTATAGA TTTTAATTTT GAAAATAAAT 360  
 TAAAAATTTT GTAAATGATG TAGTAAAGGT ATGTCGAATA 400

40 (2) INFORMATION FOR SEQ ID NO: 789:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 762 base pairs  
 (B) TYPE: nucleic acid  
 45 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 789:

GTTTAAAGAT GGAGAGATTA TTGATTTTTC AGCTGGAAAA GGTGAAGCGG TATTGAAAGA 60  
 TTTAATCAAT ACTGATGAAG GTTCAAGAAG ATTAGGTGAA GTAGCATTAG TACCTGATGA 120

55

ATGTCATTTA GCGATTGGAT CTGCTTACGC CTTTAATATT CAAGGTGGAA CGGAAATGAC 240  
 TGTTCAGGAA AAGATTGCAA GCGGATTAAA TGATTCAAAT GTACATGTCG ATTTTCATGAT 300  
 5 TGGTAGTAGT GATTTGACTA TTTATGGCAT ATTCGAAGAT GGTTCAAAAG AACTAGTATT 360  
 TGAAAATGGA AATTGGGCAT CAACATTTTA ATAAATGTTA TTTTGAGGTG CTGAGTAGGA 420  
 AATGAAACAT GTATTTAAAG GTCAAATACG TGATTAAAGT ATAGATTGGG AGATAAAATA 480  
 10 ATGACAAATC AGGACAGACC AATGAAATCT ATGTCAGAAT CAAAATGTTA TAAAAATAGA 540  
 CAAGTTTTCC CTCAAGATAC GAATCACCAT CATACAATGT TTGGTGGTAC ATTGATGGCT 600  
 15 AATATTGATG AAATTGCAGC AATCAGAGCT ATGAAACATG CTGGTGCACA AGTAGTTACC 660  
 GCATCTACAG ACTCAGTAGA TTTCTTAAAG CCGATTAAAA CAGGGGACAT ATTACAATAC 720  
 GTAGCGATGG TTTCATACGC TGGGACTAGT TCAATGGAAG TG 762

20 (2) INFORMATION FOR SEQ ID NO: 790:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 25 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 790:

TTTAATTTTA TCITTTGGAT ATCACATAGA TGCTACTTTT CTATACTGTT CTAAATCTAT 60  
 TATTTTCGTCA CATTGATTG CAATAGCCAT ATCATGTGTT GCTAAAATCA GCACTTTATT 120  
 35 TTCATCGACC AAACCAAATA ATGATTGAAT AATCATCTGT CCTGTTTTAG GATCTAACGC 180  
 ACCCGTTGGT TCATCAGCTA ACATAACAAT CGGATCTTTT AACATCATTG TAATTAAAGC 240  
 GACACGTTGT TGTTACCTC CACTTAGCGT ATGAACCTTT CTTTTTAAAC TGTTTGACAG 300  
 40 ACCAACTGT TCTATATAAC GtATCTtAT TTGTnCTTTT TCTTTCTTAC TTATTTTTTT 360  
 ATATGCTAAT CCAATATCTA AATTTTCATT TACTGnCAAA 400

45 (2) INFORMATION FOR SEQ ID NO: 791:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 50 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 791:

AACGTAAAGC GGAAGTTGGG ATGGTTGAAG ATGCTGAATT TCATGCGCAA CTACATCGTT 120  
 ATAATGCTTT TCTAGAGCAA CATCAAGATG ATAAAGTGTT GTATTnGAA ATTGGAATTG 180  
 5 GTTATACTAC ACCACAATTT GTGAAGCATC CTTTTAGCG TTGACACGTA AAAATGAAAA 240  
 TGCCCTTTAT ATGACGATGA ATAAAAAGGC TTCGCATTCC GAATTCAATT CAGGACGTAC 300  
 CATACTTTAA CTGAGATTCT CAACTTGTTT AGCAGACTCC GGACGCAGCA CACGAAATAC 360  
 10 ACATGGGGGC AGAGTnACTT ATGGACCGTT GAATGnGATA 400

## (2) INFORMATION FOR SEQ ID NO: 792:

15 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 678 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 792:

GTTCCGTTTG ATACAGAGAA GCGAATGTAA GCATAATCTT TAACAGTATC GTATGATAtA 60  
 25 AtTTAATTGG CAACTTTTTG TCACCTTCAT AAACCTCAAA TTTCTCCAA AATTGACCTG 120  
 ATTGTAATCC TAATTCAATT TCTGGTTTTG AATCAGTGAA AATAACTCTA GCAGGTTTAA 180  
 30 CAGAACTTGC ATAATGATAA AACTGTTGAG TTCCATCTTT CTTTTTCATT TCAAAATCAA 240  
 TTGACGAGA GTTTGGTGCG CTATGATCTT TGTCTTTTAT TGCAGGGTTT TTAATCGCTT 300  
 CTCTAAGTTC CTGaTTCAAA ATAGGATATG TATTGTTagT GGCyTTTGCT GCTGGTTTAA 360  
 35 CTTCTTTTGT TTCCTTAGGG GcTTTAACTT CTTTAACTTC TTTAGCTTCT TTTGTTTCAG 420  
 AAGTAGGGGC CTCAACTTCT TTATTAGATA CTGAGACAGC ATTAGCTACT GGTTTAGTTT 480  
 CTGGAGCTTT TTCAGATGTT GTTGTGGAC TTGCAACTGC TTCAGTTTTT GGTGTGCTT 540  
 40 CTGTATTTGT ACCACCTGTT TCTTCAGCTG CTGCTTGTTG TCGCCATTG ACATTAATAA 600  
 TAAAGTGTA CTAATTGCTA CAGATGCAAC GCCTAGTGAT GACTTTCTAA TTGAATAAAA 660  
 TGATTTAAAT TCTTTTTG 678

45

## (2) INFORMATION FOR SEQ ID NO: 793:

50 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 351 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55

ACTGGCGGAT CCACGATGGC ATGTGTTAGT GAAGCAATTC ATTTATTACC ATATAATGTA 60  
 TTCTTCGTAC CAGCCAGAGG TGGACTAGGC GAAAnTGTTG TCTTTCAGGC AAACACAATT 120  
 5 GCAGCCAGTA TGGCACAACA AGCTGGCGGT TATTATACGA CGATGTATGT ACCTGGATAA 180  
 TGTCAGTGAA ACAACATATA ATACATTGTT GTTAnGAGCC ATCAGTCATT AAACACTTTA 240  
 GGACAAAATT AAACCAAGCA AACGTTAATA TTACACGGGC CTTTGGTGAT GCGCTGGAAG 300  
 10 ATnGGCGCCT CGGACGTCCA ATCACCTGGA AAAGTCTCTT GGAACCACTT C 351

## (2) INFORMATION FOR SEQ ID NO: 794:

15 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 794:

GGGCGAGGCG TTCGCGCACC GGCCGAGCAG CAAATAGGCC GGGATGTGCG GTCTTGCTGC 60  
 25 AGGTCCGAAA AATATCAACT TGAAGAGGTA ACACCGnTAG ATATGTTTCC ACAAACAACA 120  
 CATGTTGAGA CAGTGGCATT ATTCAATTTG AAATAGCGCA CATGATTGTA GATAAAATTT 180  
 30 CGCCTTAATA AGTGAAGAAA GAAGTCGTAT ATTAAAATTT TATTACAGCC AATTACTTTT 240  
 CTTGATATGA ACTTTTTTAAA TTAAATGTGA CATTGTATAC TATATTTAAA GAAGAATAAG 300  
 AATGTCATGA TCGGGAGGGT TGGTAATGCA TAAAATTGAT TTAACGACAA ATAATTTTCA 360  
 35 AATCGAGGT TTATTATCCT GGCAACCTGG TTATGCGTT 400

## (2) INFORMATION FOR SEQ ID NO: 795:

40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 407 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 795:

ATGTTCCAGG AACGTATTTT TACAACCGAC AATTAGCATA TGTCATAATG AGTTTTATAA 60  
 50 TTGTATTTTT TATTGCATTT TTAATGAATG TTAAATTACT GAGTAATATT AAAGTGCAAA 120  
 AAGGTATGAT TATAACTATC GTCTCACTAT TATTACTGAC GTTAGTAATA GGTAAGATA 180  
 TTAATGGTTC TAAAAGTTGG ATAACTTAG GATTATGAA CTTACAGGCA TCTGAGTTAT 240

55



TAAGTAAACC AAAATTAATt TTAAGTCCTA TTGTATTAGC ATTAGGTTGT ACGTTTTTAG 360  
 TTTTCCTACA AAAAGACGTG GGCAACATTA CTAATATTAA TnATnTT 407

5

(2) INFORMATION FOR SEQ ID NO: 796:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1053 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 796:

CAGTAGGTAC ACTTGCAGCA TTTGTTGGAT ACTTAGAGTT ATTGTTCTGGG CCTTTACGTC 60  
 GTTTAGTCGC ATCATTTACA ACTTTAACGC AAAGTTTTGC TTCAATGGAC CGTGATTCC 120  
 20 AATTAATTGA TGAAGATTAT GACATCAAAA ATGGTGTGGG TGCTCAACCT ATTGAAATTA 180  
 AACAAAGGTCG TATTGATATT GATCATGTTA GTTTTCAATA TAACGATAAC GAAGCTCCAA 240  
 TTTTAAAAGA TATTAATTG AGTATTGAAA AAGGAGAAAC AGTTGCTTTC GTAGGTATGA 300  
 25 GTGGTGGTGG TAAATCAACA TTAATTAACT TAATACCGAG ATTTTACGAT GTAACCTCTG 360  
 GGCAAAATTTT AATAGaTGGT CACAACmTTA AAGaTTTTTT AACGGGAAGT TTAAGAAATC 420  
 30 AAATAGGATT GGTGCAaCAG GATAATATTT TATTCTCTGA TACAGTTAAG GAAAATATTT 480  
 TaCTTGGTCg TCCaACAGCa ACAGATGAAG AAGTAGTTGA AGCGGCgAAA ATGGCTAATG 540  
 CACATGACTT TATTATGAAC TTGCCACAGG GATATGACAC TGAAGTAGGT GAACGAGGTG 600  
 35 TTAAATTATC AGGTGGTCAA AAACAAAGAT TATCGATTGC TAGAATATTT TTAAATAATC 660  
 CGCCAATTCT TATCTTGGAT GAAGCAACAA GTGCACTTGA TTTAGAAAGT GAATCCATTA 720  
 TTCAAGAAGC ATTAGATGTG TTGAGTAAAG ATCGAACGAC ACTTATCGTA GCGCATCGCT 780  
 40 TGTCCACTAT TACACATGCT GACAAAATTG TCGTAATTGA AAATGGACAT ATTGTTGAAA 840  
 CAGGTACGCA TCGTGAATTG ATTGCAAAAC AAGGTGCTTA CGAGCATTTA TATAGCATTG 900  
 AAAACTTATA AAGTATTAGT TGTTTGAATT CAGTACAATC TTGAAGAGAA AATTTGTAAC 960  
 45 AGGATGGTGG GGTCAATAA TAGAAAAAGC AGTAAGAGAT TTTCTTAGTT GAAAATAATC 1020  
 TTnCTGCTTT TTTAAATTTA ATTTCGnGAT TCA 1053

(2) INFORMATION FOR SEQ ID NO: 797:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 544 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

55

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 797:

5 AAGAGTGA CTCTGAAGTGA AAGAAGGGGA CCGTGTCGTG TTCCAACAAT ATGCTGGTAC 60  
 AGAAGTTAAA CGAGATAATG AAACATATCT GGTATTAAAT GAAGAAGATA TTTTAGCAGT 120  
 TATTGAATAA TACAGAACTT AATTCATAAA TAAATTAAAT AGAACGAAAA TGAAACACAA 180  
 10 CTAAACAAAT GGAGGTTTAT CATTTATGGT TAAACAATTG AAATTCTCTG AAGATGCACG 240  
 TCAAGCAATG TTACGTGGTG TTGACCAACT TGCAAATGCA GTTAAAGTAA CGATTGGTCC 300  
 TAAAGGACGT AATGTTGTAT TAGATAAAGA GTTTACAGCA CCTTTAATTA CGAATGATGG 360  
 15 TGTGACGATT GCyAAAGAAA TCGAATTAGA AGATCCATAT GAAAATATGG GGGCTAAACT 420  
 AGTTCAAGAA GTCGCAaATA AGACAAATGA AATTGCTGGT GACGGTACGA CAACTGCAAC 480  
 AGTATTAGCT CAAGCAATGA TTCAAGAAGG CTTGAAAAAT GTTACAAGTG GTGCGAACCC 540  
 20 AGTT 544

## (2) INFORMATION FOR SEQ ID NO: 798:

## (i) SEQUENCE CHARACTERISTICS:

25 (A) LENGTH: 372 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 798:

CAATTGCATA GATATTGCTG ATAGACGTAC GGCTTTGTTT ATCAACTTCT AATAATCCAC 60  
 35 GGTCAGCGAA TTTAACACCT AATTTTCGTCT GTGTTTGGAC GACGACCTAC AGTTACTAAT 120  
 ACATAATCAG CTTGATTGT TTTCTCTTCG CCTTTAGCTT CATAAGTAAC TTTAACTCCG 180  
 TTATCTGTTT CTTGAGCTGA TTTAGCCATA GCTTCAGTAA CGATTTCAAC ACCTTTTCTT 240  
 40 TTCATACCTT TTTTAACAGG TTGTGTGCAT TTGnTTTTT CAGGCCACCT AAGATATCTT 300  
 TAGCACCTTC AAGGGATGGG GTACTTTCTG nAACCAAAGT TAGCAAATGC TGTACCTAAT 360  
 45 nCTGGTCCAA TG 372

## (2) INFORMATION FOR SEQ ID NO: 799:

## (i) SEQUENCE CHARACTERISTICS:

50 (A) LENGTH: 1182 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 799:

5 AAACGACATT TGTTTAATTG GAAGAATTaG CACCATT'TTT TGAGGCGGGT ATAGAtTCAT 60  
 TTA AAAATCGA TGGTATTCTA CAAACGGAAG AATATATTAA TGTGGTAACG GAACAGTATC 120  
 GTCAAGCGAT AGATTTGTAC AATGAAGATC CTGAAATCTA TGAAGATGAG AAATTTATGT 180  
 10 TGATGGATCC AATTGAAGAA ATTCAACCTg ATCATCGACC ATTTGACGAA GGTTCCTTAT 240  
 ATAAACAAAC AGTATATTAA GGAGGTTAAT CATGAAGACA ATAGAAGAGA TTAAATCAAC 300  
 TCCTAAACA GTTATGAAGA AACCAGAATT ATTAGCACCT GCTGGAACT TAGAAAAGTT 360  
 15 AAAAATAGCA GTACATTATG GCGCTGATGC CGTATTTTIA GGTGGTCAAG AATATGGATT 420  
 ACgTTCaAT GCTGaTaATT TCaCGATGGA AGAAATAGCT GAAGGTGTTG AATTTGCGAA 480  
 CCGTTACGGT GCCAAAATTT ATGTTACGAC AAATATTATT GCACATGATG AGAATATTGA 540  
 20 AGGTCTAGAA TCATATTGC GTAATTTGGA AAAGACTGGT GCGACAGGTA TCATTGTTGC 600  
 AGATCCTTTA ATTATCGAAA CATGTAAAGA AGTTGCGCCA AAACCTGAAA TTCATTTATC 660  
 TACTCAACAA TCACTTTCTA ATTACAAAGC TGTAAGATAT TGGAAAGAAG AAGGATTGGA 720  
 25 TCGTGTGTA TTAGCACGTG AGACCGGCGC GATGGAAATG CGTGAAATGA AGGAAAAAGT 780  
 AGATATTGAA ATCGAAGCAT TTATTCATGG TGCTATGTGT ATCGCCTATT CAGGTAGATG 840  
 TACATTAAGT AATCATATGA CTGCAAGGGA TTCCAACAGA GGCGGTTGCT GTCAAAGTTG 900  
 CCGTTGGGAT TATGAATTAT TAGAAGTTGA TGATAATGGT GAACTTGATG TTTTATTATA 960  
 TCAAgGTGAA GTTACACCGT TTGCGATGAG TCCTAAAGAT TTA AAAATTAA TCGAATCAAT 1020  
 35 TCCTCAAATG ATGGATATTG GTGTGGACTC ATTAAAAATT GAAGGACGTA TGAAGTCAAT 1080  
 TCATTATATT GCAACAGTTG TCTCAGTATA TCGTAAAGTC ATTGATGCGT ATGCGGCAGA 1140  
 TCCTGACACT TTAAGATTAA TCCGGAATGG TTAATAGAGT TA 1182

(2) INFORMATION FOR SEQ ID NO: 800:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 989 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 800:

GTATTCTTCC AATAACACCT TTCATTTGGA AACCGTTTAG AAAGAATACA GTTACTTCAG 60  
 TTTGGTTTGC TTTAAAATTC TCTaGTGCTT TGTCTTGAT GTTTTCGtTG cAATCATCTG 120

TTTTCTTTAT CTAACCAATG AACACTCATT TTATTCTTGA ACCATGTCAT TTGTCGTTTT 240  
 GCATATTGGC GTGAATGTTG CTTTAAATCA TTGACAGCAT CTTCATAAAT CATTGTGCCG 300  
 5 TTAATCACAG GTATTAAATC TTTATATCCA ATAGCTTGCA TACTTTGGCA AGATTCATAG 360  
 CCTTGTTCAA CAAGTTGTTG CACTTCTCTA AATAATCCGT GATCCAACAT AATATCAACA 420  
 CGTTTATTTA TTCTTGAATA TAATGTTTTA CGCGACATTT CAATCCCTAA TAATAATGTA 480  
 10 TCATAATTTT CAGTAAATTG TTGCACTTTC TTGCGATTAC TCAAAAGTTT TTTTGTTTTT 540  
 AAATAATATT CAATAGCGCG CAACACTCTT TGGcGGTTGT TAGGGTGAAT ATTTTCTGac 600  
 15 AGAAACCGac ATCAAATGA GCTAAATAAT CGTGTAGTTG CTGATTATCT AAATGTTCTA 660  
 ATGCAGATAA CTTTTGTTTA ACTATGGATA ATTGTGCAGG TGTAcTGTTT CATCTTCTAA 720  
 TTCATAATTA TATATTAATG ATTGAATATA TAAGCCTGTT CCACCTGCTA TGATTGGaAC 780  
 20 TTTACCTCTA TTCGTtATAT CAGTAATTAA ATCTTCTGCT AATCGCTTGA ATTCATATGC 840  
 TGAAATGTA TCATCAGGAT TCAAGATATC AATTAAATGA TGTGGAATAC CATCCATTTc 900  
 TTCAGGTGTh ACTTTTGCAG TTCCAATATT CATATGTCTG TAGACTTGCA TAGAGTCACC 960  
 25 GCTTATGATT TCACCATTGA TACGCTTCG 989

(2) INFORMATION FOR SEQ ID NO: 801:

(i) SEQUENCE CHARACTERISTICS:  
 30 (A) LENGTH: 543 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 801:

CGTTAGATAT AGAATTAAAA GATAATATTA AATTTCAAAA CGGTCAAAAA TTGACTGCAG 60  
 40 AAAAAAGTGAA ATCTAGCCTT GAAAATAGCA TGAAAAAAG CGACTTGGTC AAATATTCAT 120  
 TACCAATATC ATCAATTACC GCTAAAGGTC AAAAAGTAC AATTAAAACC AACTCCGCTT 180  
 ACCCTGaACT TGTATCTGAA TTAGCTAATC CTTTATGGC AATTTATGAT ACAGATGCTA 240  
 45 AATCAGATGT TAATCAAACCT CCTGTTGGTA CAGGCCCTTA CCAAATAAAA GATTATAAGC 300  
 AATCTCGAAA AATATCATTG TCGAATTTTA AGGACTATTG GCAAGGTAAA CCGAAACTTG 360  
 ATCATATTAC TGTGACGTAC CAAGAAGACG GCAATAATCG CGTCAGAAAT TTAGAATCTC 420  
 50 AAAAAAGATGA TTTAATAACT GATGTCCCAG TTAATAAAGT TCAAGACATA GAAAATAATC 480  
 AAAATTTAAA AGTGTCAAAA GAATCTGGAT TTAGAACTTC TTTACTTATG TATAATCATA 540

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## (2) INFORMATION FOR SEQ ID NO: 802:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1139 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 802:

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5      GCGAATTCGT ACACACATAT ACACAAAGAT AATCATAGTT TTACATTGAA GCACATGAAA      60
15     GATAATTCAT TTAAAGGAAG GTATTATCAA TGAATAAAAA AATGGGATTA TTAGTTATGG      120
      CTTATGGCAC ACCTTATAAA GAAAGTGACA TAGAGCCATA TTATACAGAT ATTAGACATG      180
      GTAAACGTCC ATCTGAAGAA GAACTTCAAG ATTTGAAAGA TAGATATGAA TTTATAGGTG      240
20     GTTTATCACC ATTAGCAGGT ACAACAGATG ACCAGGCTGA TGCCTAGTT TCAGCATTA      300
      ATAAAGCATA TGCAGATGTT GAATTTAAAC TATACTTAGG ATTAAAAACAC ATTTCCACCAT      360
      TTATCGAAGA TGCAGTTGAA CAAATGCACA ATGATGGCAT TACTGAAGCA ATCACGGTAG      420
25     TACTAGCACC ACATTATTCT TCATTTTCAG TAGGATCATA TGACAAACGT GCTGATGAAG      480
      AAGCTGCAAA ATATGGTATT CAACTTACAC ATGTGAAACA TTATTATGAA CAACCTAAAT      540
      TTATTGAATA TTGGACGAAT AAAGTCAACG AAACATTAGC TCAAATACCG GAAGAGGAAC      600
30     ATAAAGACAC GGTATTAGTT GTTTCGGCAC ATAGTTTGCC AAAAGGTTTA ATCGAAAAGA      660
      ATAATGATCC ATATCCACAA GAACTAGAAC ATACTGCGCT TTTAATTAAA GAACAATCTA      720
35     ATATTGAACA TATCGCGATT GGTTCGCAAT CTGAAGGTAA TACAGGTACA CCTTGGTTAG      780
      GGCCAGATGT ACAAGATTTA ACACGTGATT TATATGAAAA ACATCAGTAT AAAAAGTTTA      840
      TATATACGCC AGTAGGTTTT GTATGTGAGC ATTTAGAGGT GCTTTATGAC AATGATTATG      900
40     AATGTAAAGT AGTTTTCGAT GATATTGGTG CGAATTATTA TCGTCCAAAA ATGCCGAATA      960
      CACATCCATT ATTTATCGGT GCAATTATTG ATGAAATCAA GTCTATATTT TAATGACGAA      1020
      AGAAGCGTGA AACGTTGTGA CTAAATCAGT GGCTATTATA GGAGCGGGGA TAACAGGTTT      1080
45     ATCAAGTGCA TATTTTTTAA AACAGCAAGA TCCTAATATT GATGTAACCA TCTTTGAAG      1139

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## (2) INFORMATION FOR SEQ ID NO: 803:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 989 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 803:

5 TATCCnAAAT AnAAATGTGC GCATTtATCA AAACCTTACA TACAATAGAG TTTTCCTTAA 60  
 CAGTAAATTA GATATTATTA CACCTGTTGA TATGTCTTCT AATGCCAAAC TGCCAGTTAT 120  
 TTTTGGATG CACGGTGGTG GTTATATTGC GGGTGATAAG CAGTATAAAA ACCCATTATT 180  
 10 AGCGAAAATT GCTGAACAAG GGTACATTGT TGTGAATGTA AATTATGCAT TGGcGCCACA 240  
 ATATAAATAT CCCACACCAT TAATTCAAAT GAATCAAGcA ACTCAATTCA TTAAAGAAAA 300  
 TAAATGAAT TTACCTATTG ATTTTAATCA AGTAATTATT GGCGGTGayT CTGCAGGTGC 360  
 15 TCAATTAGCT AGCCAATTTA CGGCAATACA GACGAATGAT CGCTTAAGAG AAGCCATGAA 420  
 ATTTGATCAG TCATTCAAAC CATCGCAAAT TAAAGGTGCT ATACTATTTG GTGGTTTTTA 480  
 TAATATGCAA ACAGTTAGAG AAAGTGAAGT TCCAAGAATA CAGTTATTTA TGAAAAGTTA 540  
 20 TACTGGCGAA GAAGATTGGG AAAAGAGTTT TAAAAACATT TCACAAATGT CGACAGTAAA 600  
 ACAATCGACA AAAAATTATC CaCCAACATT TTTATCTGTT GGAGATAGCG ATCCATTCTGA 660  
 AAGTCAAAAT ATAGAATTCA GTAAGAAATT ACAAGAATTG AATGTACCAG TAGATACTTT 720  
 25 GTTTTATGAT GGTACGCATC ATTTACATCA TCAGTATCAA TTTCACCTTA ATAAACCTGA 780  
 ATCGATAGAT AATATCAAAA AAGTGTTACT TTTCTTAAGT CGTAATACAT CCTCTAGTGG 840  
 TATTCAAACCT GAAGAGAAAC CACAAATAGA AAATCCGAGT AATGAATTAC CGTTAAATCC 900  
 30 TTTAAACTAA TGATAAACAG TAGTAATTTA TTAAGTTAAG AACATTTAAG ATTTTCAAAT 960  
 TAAAAACGAG AATTTAAAAC ATGTGGTGC 989

## (2) INFORMATION FOR SEQ ID NO: 804:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 711 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 804:

45 TAAnCCCTGG TTTAATGATT TTGATTACGT GTTTTTATAA TAAAAACATA TCGAACATTG 60  
 ACTACGTTAT TAAGCTGCTT TTTGTACAC TTTATAACCA ATAGCTTAAG ATTTAAAACT 120  
 50 AATCGGAAAG AACAATGATT CACCAAnAAAA ATATTTATGT TGCTATTAAA AATCAGTTAA 180  
 TACGAATGTT AAAATACGTT TGATTTTCAT TAATAATGAT TCAAGTTTAT TTAAATGAGC 240  
 GTTAATGTCA GTCTGTTTTG ATGCACCTTA TAATAAGAC AGATAGTTCA AATTACGTAA 300

AAAGCAACAT TAGCATTAGG AATATTAAC TACAGGTGTGT TTACAGCAGA AAGTCAAAC 420  
 GGTACGCGA AAGTAGAACT TGATGAGACA CAACGCAAAT ATTATATCAA TATGCTACAT 480  
 5 CAATACTATT CTGAAGAAAG TTTTGAACCA ACAAACATTA GTGTTAAAAG TGAAGATTAC 540  
 TATGGCTCTA ACGTTTTTAA CTTTAAACAA CGAAATAAAG CTTTTAAAGT ATTTTTACTT 600  
 GGTGACGATA AAAATAAATA TAAAGAAAAA ACACATGGCC TTGATGTCTT TGCAGTACCT 660  
 10 GAATTAATAG ATATAAAAGG TGGCATATAT AGCGTTGGCG GTATAACAAA G 711

(2) INFORMATION FOR SEQ ID NO: 805:

(i) SEQUENCE CHARACTERISTICS:  
 15 (A) LENGTH: 680 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 805:

ATCAGGAAAA ACAGaATAAT GTAAATCAAG CTGTTCAAGC TCAAATAAT ACTAATGAAA 60  
 25 CATCAAAAGT ACCGGCTAAT TTTGTCAAAT TGAATGATAT TAAACCAGGT GATACTTCTA 120  
 TACAAGGAAC AACTTTACCA AATCAATTTA TACTATTAAC TATTGATAAA AAAGATGTGA 180  
 GCTCAGTTGA AGATTCTGAC AGCAGCTTTG TTATGTCTGA TAAAGATGGG AATTTTAAGT 240  
 30 ATGACTTAAA TGGTCGCAAA ATTGTTTATA ATCAAGAAAT TGAAGTGTCT TCATCAGATC 300  
 CCTATTTAGG TGACGATGAA GAAGATGAAG AAGTAGAAGA AACTTCAACT GAAGAAGTTG 360  
 GTGCTGAGGA AGAAAGTACA GAAGCTAAAG CTACATATAC AACACCGCGA TATGAAAAAG 420  
 35 CGTATGAAAT ACCGAAAGAA CAGCTAAAAG AAAAAGATGG ACATCACCAA GTTTTTATCG 480  
 AACCTATTAC TGAAGGTTCA GGTATTATTA AAGGCCATAC CTCTGTAAAA GGTAAAGTTG 540  
 40 CTCTATCTAT TAATaATAAA TTWATTAAC TTGAGaCAAA TGCTAtGGTG GtCCaAATaA 600  
 AGAAGaAGCG AAATCTGGAT CAGAAGGAAT CTGGATGCCT ATTGATGACC AAGGATACTT 660  
 TAATTTTGAC TTCCAAACGA 680

45

(2) INFORMATION FOR SEQ ID NO: 806:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 950 base pairs  
 (B) TYPE: nucleic acid  
 50 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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GTATTTTCATT AGCCATTGGC AATTGACATC TGACAATGAG GAATGGCTTT TGCATTGGAA 60  
 TTCACAGTTG GAGTGCATTT ACTGGTTATT TTGGAGGTCA TTGTTGATAC ATTATTAATG 120  
 5 GAGAATAACC GAATTTGTGA TGTTATTTCC ATTTTAAATA TTTGCAATTG TATTAAATGC 180  
 TGCAC TTGGA GATAAAATTA AAAATCCTTA TGGATCTGCC ATAATCTTG TTCTAGTTAT 240  
 TATCGTATTA AGTTGGGGAG GTATTGACAA GACTTGTTTCG TGGTAAAGTA CTTCAAGAAA 300  
 10 AAGAAAATGA ATACTTTTTG GCAGCAAAAT CAATTGGTAC ACCCACATAT AAAATTATTT 360  
 TGAAACATCT TTTGCCGAAT ATATTAAGTG TAGTTATCGT ACAAGCAACA TTGTTATTTG 420  
 CCGGTATGAT TGTAGTGGAA TCAGGTGTA GCTTTTTAGG ATTGGGAATT AGTAAAGCAA 480  
 15 TACCATCTTG GGGTAATATG TTGAGTGATG CTCAAGAAGG GGATGTTATA AGTGGTAAAC 540  
 CGTGGATATG GATGCCACCT GCTATAATGA TTACATTAAC TATATTAAGT ATAAACTTTG 600  
 TAGGGGAAGG GATTAAAGAT GCTTTTAATC CTAGAGGTAG ACGTTAAATA ATAAAAGAGG 660  
 CACTAGTTAA TTCTAGTACC TCTTTATTTT ATCTCTTACG TCCTAAACCC ATCGCTTTTT 720  
 CCATTTTTTT GACAGTTTTA AATGAAACTT TGTGTGCTyT ATCTCTACCT TGATCTAAAA 780  
 25 TATCAyCAAG TTTATcTGAG TTATAGAAAC TTTCGTATTT TTCTTGAAT TCTACTAAAA 840  
 ATGCTTTAAC TATTTcAGCA AGGTCACTT TAAATTTACC ATAACCTTCG CCCTCATATT 900  
 TTGCCTCAAT ATCTTTAATT GGCATGTCTG TTAATCCAGC GTATATTGAA 950

30 (2) INFORMATION FOR SEQ ID NO: 807:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 418 base pairs  
 (B) TYPE: nucleic acid  
 35 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 807:

GTTACCAGTC GAAGCTTTAC GACCTGTTAC GAAACATTGT TTACCCATAT GAGTACCTCC 60  
 TTTAATAAAT ATAAATACAC ATAACTACTT ATATACTTAA TTAAGATAGC ATAGTTTCAT 120  
 45 TTGAAAAACA ATGAATAATT TTCACATAAA AGTCAAAAAT ACTGAGTTTT GTGATATAAT 180  
 TGTAGACTGT GAAGTTATGT AGTATGATAT TTTAGAGAAA TAAGTGAATG AAACATTTAA 240  
 AATTTTTATT TrATGATACT ACATCTATTA AAAGAAAACG CCTATAGATA ATCGTCaTGA 300  
 50 GTGTAAATTC AGTTtACTCa AcAtATAaTA GGkGaTTTAA gCgTAAGtCa TTCTGATAAG 360  
 TTGTACCATT GATATTTTAT GAAATAnTcn ATGAACTTAA AGCGTTTATG CTACACTA 418

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- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 842 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 808:

10 AATGGCnATT AATCTTTAAT ACGATGCTTG AGGATTTTTTC CTAATAAAAC CTTGATTTTCm 60  
 AAAAGGGTTT AAATCmAATG AAACAATAAT AAaAAAATGw CGCAATATAA TAATAAGTAC 120  
 15 AAATTTAATT AAGAAATTAA ATTGATTGTA TATGTATATT TTGGTAACGT AAAAGAGAnA 180  
 TATACAAAAT AATTAATTAT TTATATGAAA AGAGAATATA AATGAAGTAT AAAACAGAGA 240  
 GACGTGAAGC GATGGGATAT TTAaMAAGGT TTGCATTGTA CATAAGCGTT ATGAYTTTAA 300  
 20 TATTTCGAT AGCAGGTTGT GGCAAAGGTA ATGAAACAAA AGAAGATTCA AAGGAAGAAC 360  
 AAATCAAAAA GAGCTTTGCG AAAACATTAG ATATGTATCC AATTAAGAAT CTCGAGGACT 420  
 TATACGACAA AGAAGGATAC CGAGATGGCG AATTTAAAAA GGGTGATAAA GGGATGTGGA 480  
 25 CGATATATAC AGATTTTCGCC AAAAGTAATA AACAAAGGTGG ATTGAGTAAT GAAGGTATGG 540  
 TCTTATACTT AGATAGAAAT ACACGGACTG CAAAGGGACA TTATTTTGTT AAGACATTCT 600  
 ATAATAAGGG CAAATTCCCA GATAGAAAAA ATTATAAAGT TGAAATGAAA AATAATAAAA 660  
 30 TTATCTTATT AGATAAAGTA GAAGATACAA ATCTAAAAAA GAGAATAGAA AACTTTAAAT 720  
 TTTTGGACA ATATGCAAAC CTAAAGAAT TGAAAACTA CAACAATGGT GaTGTCyCAA 780  
 TTAATGAGAA TGTTCaAGT TATGACGCAA AATTTAAAAAT GAGCAATAAA GATGAAAATG 840  
 35 TT 842

(2) INFORMATION FOR SEQ ID NO: 809:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 451 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 809:

TAAGACTATG CCATCTTGGC AACGCGTTGT CGCATATTCA TTATTAGTAA GTATATGCAA 60  
 50 GCATGATTTT GCCATAAcT TACcTcTTc TATATTTAAG TACCACTTTT ATCATTCCCT 120  
 ATAATATTTA ACTTATTTAA TTAAACGTAA ATTTAACACA ATACGAATAC CAAATCAAAA 180

AAAAATAGAT GTAGTCAGTT TAATTAAACT ATCCAATTGA AAACACACTA CTTTTTAGTA 300  
 TTTTCAAAT AATTTTAAAT GACCACATCT ACAACGTATT ACTATTATCT TTTGTTAGTT 360  
 5 ATATATTCAT TTTCAATTTA rAAATAAACA CTTAtTTAAA TCACATTCTA CTTTTGAGAT 420  
 GAGCTCAAAC TAACATTAAA TTGTTTATAT T 451

(2) INFORMATION FOR SEQ ID NO: 810:

10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1499 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 810:

20 ACATTTTGTG CTTGTTGTCC AATCCAATTT CTACTTTGTT GAACAGTATG AGTTGCTTGA 60  
 CCACGCATGT TACTCAGCAT TTGTCCAACA TGAGTATTTT GAGCAAAGTT ACGAGATTGA 120  
 TTCAACACAC TGTTTTTCAT CATTTnCCATT TTAGGTGAAA TACGACTAAC TGCTTGTGTC 180  
 25 ATTGTCTTTT GCAATCCTGT TTTAACTGCA AATTTTTCTC CGCCTTTGAA GCCTAATTTT 240  
 ATTAAACTTT TCCCAGCACC TTTGAGGAAG CCCATACCTG GCAATGGAAT AAGCGAAAGT 300  
 CCTTCCATGA TTCGTTCTTC TTTAGATAGC TTTCTTCCAG TTACAATATT TTTTCCTGTG 360  
 30 GCTGCATTG CTGCTGAATA AGCGGAATAA GCACCAATAG CTACTGCTCC AGCAACAGGA 420  
 TTAATACAAG ATAAAACTAC CATACCAGCT AGTGCTGCAA TCTCTATAGC TTCTTCTTTT 480  
 TTCTTTTGCT CCTCTAGcTC TTCCGCTTCA GCTACTGTCA TGTAATCACA AGAAGCGCCC 540  
 35 TGAGTCATCA TTTTTTCAAA ATCACTTTTA GATAATTTCT TATCTTCTTT TTTCAATTTCT 600  
 TTGTAATGCT GATCAATTAC TTTTACAAAT TCTTGATCCG ATTTTAATAT TTCATCGATG 660  
 CTATAAACAT CGCTGTCACT TTTCTTGGCA TCTCCCTTTG CAATTTTCCC AGAAGCCCCA 720  
 40 TAGGTATCTC TACCATGTCC ACCACCATTT TTAATTAGTA TATTTTCCAA TTTAACATTC 780  
 GTTATACCTT TGAATGCTTT ATCTATATCT TCTATAAATG GCGTGCAAT AATTTCTTTC 840  
 45 ATTTTCGAAT CTAATTGAGA TGCATAATCA TATAACTCaT TTTGATAATA CCCCATTAAT 900  
 TTAGATCCTT GTGGAcCTAC TACACTACTT GTTAATGATA TTGCGCCATC TTCGTCTAAA 960  
 GAACTGACAT CGCTTACCGC ATCATCCATT GTTGATCTA CATCTAAGAA GTCTTGACCC 1020  
 50 TcTATTGCAT CTATTACACT TTGGATAGAT GACTTTTCAT TGCATAATC AGCTGTTAGA 1080  
 TATTCAATAT CTTTGTGCAT GTCATGCACC TATCCCTCAA TATTATAGTA AAGCTTGGCA 1140

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CCACCGAGTG TACTCAATGG ACCTTTGAGA CCACTAATGA CTGTTGCAGC ACTACTATAG 1260  
 CCATTTTCCA TAGAATGTGC AGCTTTTTC A TACTGTAGT AATTTAATTG CGCTATTTTT 1320  
 5 CCAAAGTTTT GAGCTATTTT ATCATACTTT TGA CTTATGC TTTCCAATTC TTTTACAACA 1380  
 TGTGCAATCG TTT CAGCTTT AACACTAATT TTTCCACTCA ACGTCATTAC TCCTCtGcTt 1440  
 TATtAATATG ATTTTcATCA GTATCGAATC CAAATAATT CCGTGATAAA nGTATTGAA 1499

10 (2) INFORMATION FOR SEQ ID NO: 811:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 620 base pairs  
 (B) TYPE: nucleic acid  
 15 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 811:

CnCGCTGCAC CGAAGAATGC TTTTGGTTTG TGTAAGATG CAGGATCTAA ACCACCTGAT 60  
 AATGTACGAC CACTTGGTGG AATAACyAAG TTATAAGCGC GTGCTAATCT CGTTATAGAA 120  
 25 TCCATTAAAA TAATGACATC TTCCCAATT TCTACTAAAC GCTTTGCAGC TTCAAGTAAT 180  
 AATTCAGCTA CTTTAACATG GTGTTCTGGT GGTTCGTCAA ACGTTGAATG AACGACTTCA 240  
 GCAGCTTCTA CTGAGCGTTC TAAATCTGTT ACCTCTTCAG GACGCTCGCC AACTAACAAA 300  
 30 ATAAATAGCT TTGCATCTGG TTTGTTCTGTA CTGATTGCAT TCGCTATTTC TTTTAATAAC 360  
 GATGTTTTTAC CTGCTTTAGG TGGCGCCACT ATTAAACCAC GTTGACCTAA ACCAATCGGT 420  
 GTTACTAAAT CCATGATGCG CGTTGAATAA TTTTGTATTT CTGTCTCTAA TTTAATACGC 480  
 35 TCATCTGGAT AAAGTGGTGT CAAAGCTTGG AAATGCGGAC GTTCTTTCAC TTCTTCTGCG 540  
 TTATGGTCAT GACAAAGTCA ACTTGTAATA AGCCATAATA TTTTTCGTTA TCTTTAGGTT 600  
 TTCTAACTTT CCCAGTTACT 620

40 (2) INFORMATION FOR SEQ ID NO: 812:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1094 base pairs  
 45 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 812:

CCGGCTGAAA TTAAGTTCTT GTTATATTTT GCAAAAATGA CAAAGAAAGA TAAAAATAAA 60

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TGAAC TATTT GCAATTAGAG AATTGTTAGA GAAAGGTTTG ATTGGTGATT GTATTCAACC 180  
 TATAATTGAA CCAATTAAAT ATACAACCAC ATTTAAAAAT ACTTTGCAAT ACTGTGGTGA 240  
 5 AAAAGCATT C TCTATAAATT TAGTAGTAAA TTCAAAGTTA ACTGAAGAAG AGATTAGTAA 300  
 CGAAaCTGTt GCACATT TAA CTGAAATAAT AACAAAAAAC AAAAGTGTTA TTCAAAAAGC 360  
 10 TTACTTGGGT CCTTCTGATG AAGGCAATGA TAGGTTGAAA CAGCAATTTT CAAGTAATAG 420  
 TTTAGCTATT TTAACAAGTG TAGATGATTG GGAAATGTTT GGAGATAAAA ATAAACTTGA 480  
 AATGGTTTTT GTACCAGATG ATAGACACAT TAAACGTAAA TTGCGTAATA TTCCAAACAA 540  
 15 AGGCATsATT ATGGATCCTT TTAATAAACT AAGTCGTAAT GTTGATTATT TAGATAATGA 600  
 TGACGAGTTT TATAGCGACG ATCACCTTTA TTATAAGGAA GATGGATACG TAGCATT TTC 660  
 AGACTATTCT GTTATAGGTG GAGAATATGT AGACGGTGGC TTTTCGCCAT TAGCtATTGc 720  
 20 GrTACATATT GTCTATTTTG ATGAGGCTAA TGAGCTAAGA GTTAAGCATT TtGTCTCTGa 780  
 TTCTAATAAT GATAGATCAA ATCCAGGTAA AAnGTTTTTT GAGGCTGTAG ATAAATTAGT 840  
 AACATGGTCA AAAAACTTAG ATATTAAAAA TAGATCTTAT GCGCTTGGAC AATTTGAAGA 900  
 25 ATTAAATGAA AATAATAAGT ATCCAGGATT AGGTTTAAAT AAAnGTTATC TATCAGCATC 960  
 ACCTAGAAAT TATGAATAGA TACTGGGTCT CAAAGAAATA GGAAAAGTTT ATATCGAACT 1020  
 30 GAACTGCAAG AATGCATTGA CATGGATGAA CACACGGGTA AAATGATCGC AGCTGAAATG 1080  
 ACTATGGTAT TAGC 1094

## (2) INFORMATION FOR SEQ ID NO: 813:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 930 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 40

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 813:

45 CACCTATCAT CGTCTCTTTA ATTCTATCTA TCTATTTACC CCAATCGTAA ATATGATGGA 60  
 CGTTATAGAA TACCAAGAGT TGCAGGTATn TCTATTATTT ATCTAGCTGT AGTAGGTGTT 120  
 ATTACGT TAA TTGTTAATTT ATTGATACCT ATTATTGGTT CGCAAGTAGA TAGTTTAGTT 180  
 50 AAAAATTCAC CGCAATATCT AGAAAAATTA ATTAATTCTA TTGATAAAAT AGCAAATAAT 240  
 ACGTTTTTCT CTTCGTATTA TAGTCAAATT AATGATTGGT TAAATTCTTT ACCTAAGAAA 300  
 ATACCATCTA TGTAAAGTGA ATTTACAGAT GGCTTTGGGT CTAAAATTGC AACGTTTGCA 360  
 55

CTTAAAGATG GACATCACTT CAAAGAATTT TCAACGAATA TTATGCCACC GAAATTCCGA 480  
 AAAGATTTTC ATGATCTACT TGAAAAAATG AGTGTTCAG TTGGTTCATA CATTCAAGGA 540  
 5 CAAATTATCG TTTCATTCTG TATCGGTATA CTGTTGTTTA TCGGTATTTC GGTATATCGG 600  
 TTGAAATATA GCTTAGTATT AGCTAGTATT GCGGCAGTTA CAAGTGTGT ACCATATTTA 660  
 10 GGGCCTACTA TAGCGATTTC TcCAGCTATT GTAATnGCTG CTATAACAYC GCCGTGGATG 720  
 CTCTTAAAT TAGCAGTAGT ATGGACTTTA GTACAATTG TTGAAGGGCA CTTCAATTTCA 780  
 CCAAATATCA TGGGTAAAC ACTTAAGATT CATCCACTTA CAATCATTTT CATTTTACTG 840  
 15 TGTGCAGGCA AATTGCTTGG TATTGTAGGC GTTATTTTAG GTATTCCGGG ATATGCTATT 900  
 TTTAAAGTAT TtAGTTACTC ATTTATTCCA 930

## (2) INFORMATION FOR SEQ ID NO: 814:

- 20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 461 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 814:

30 GTATGATTGC TGTTTTAATA CCAGATGATG GCAGTGGCAA ATCTTATGAC TATATGCTTG 60  
 TGAACCCAAA AATTGTAAGT CATAGCGTTC AAGAAGCTTA TTTACCAACT GGTGAAGGTT 120  
 GCCTTAGTGT CGATGATAAT GTTGCTGGTC TAGTTCACCG TCATAATAGA ATTACAATTA 180  
 35 AAGCCAAAGA CATCGAAGGT AATGATATAC AATTACGACT AAmAGGATAT CCAGCAATTG 240  
 TTTTCCAACA TGAAATIGAC CATTTAAATG GTGTAATGTT CTATGATCAC ATTGACAAAG 300  
 ATCACCCATT ACAACCACAT ACAGATGCAG TAGAAGTTaA aACACATTTT cTAATTATCA 360  
 40 AAgCTTAGGA TAAtATGATG tCCTAAGCTT TcCTTTACAA CTTTTCGGAT AACCAACAGT 420  
 TAATATATCA CCTTCTAACC AAACTTTTAA TCCCTCATTA A 461

## (2) INFORMATION FOR SEQ ID NO: 815:

- 45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 573 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 815:

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AACGATATAA TAGAATTGAA TAAAGTGGGT GATAATGTGA CTAAAAATGA GATTAGAAAA 120  
 TACATTTTAC ATAAAAATGAA GAATTTTAAT AAAGCTGAAA AGCGAAAAGC AGACACATGG 180  
 5 TTAAGAAATC AATTTTTTGC AACTGAAGAA TACAAAGAAG CAAACGCAAT TCGCTAGTT 240  
 CTTTCTTTTA ATCATGAAGT AGATACTTTT TCTATTATTG AACAAGCCTT AATGGATCAT 300  
 AAACGTATTT TTGTACCGAA AATGGATTAT TTAAATCATC AAATGACTTT TAAAGAGATA 360  
 10 TTTAATCTCA AAGATATTGA TGTCGATAAT AAGGGGATTT ACTATCCAAC TTCAAAAGGT 420  
 GAAACAACGA ATAACCTAGA TTTAATTGTT GTTCCTGGTG TTGGATTTC AAGACGATGGA 480  
 TATAGAATTG GGTATGGTGG TGGCTATTAC GACAGGTTTT TAGCTAATTA TCAGACAAAG 540  
 15 ACAATAAGCT TATTATACGA TTTTCAAATA ACA 573

(2) INFORMATION FOR SEQ ID NO: 816:

20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 3989 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 816:

TAGTTTAAACA ATGTCTATTC TCATAGAATT TGTCCAAC TAATGTAGACG ATTCACTAAA 60  
 30 CTTCTAAAAA AATAAACCCC AAATTATAAT AGTCTCAATA TTAATATATT ACAATTTATT 120  
 CATAGGATTT TTATCATTTT AATTAATAGG TTGTTATCAG GGTAAATAA ACATTTTTTG 180  
 35 TAATAGTCCT TTTTACGTT CTTTAAATAA CTCAATTCTA TTCATTTGAT TATTCATTTT 240  
 ATTGTCTATA GATTTTAAACA ATGCACCTTAC TTTATCTGTG TCAGTGAGAC AAGGTATTTT 300  
 AAGATTTATA TTGCATAAGT TCGCATGAGT TAATTTAGCT GGTGCATTAC CTGTGACAAA 360  
 40 TGCTCGTAGT TCTTTAAAAA TTAAATAATA ATTCATAAAA AACAAATTAT GATCATTACT 420  
 TTTAACTACA TGCGCATGAT TATTTACCCA GTATTGCCCA TTAGCAATAA AGCTACTCGT 480  
 CTCAAACCTGC CCCCATTTTG CACCATCTTC TCCTATTAGT AATCGTTCTT CATTATTGAA 540  
 45 TAAATAATCT TTTACGTAAT CAATAATTCC AGTTGCACCA TAGTAAGGGT ATAACCCCTT 600  
 TTCTCTTAAT GAAGAAGTAA TTGGTTTTCT TCTATTATTT TCAAAGATAA AGATGTCITT 660  
 TATGAATTTG TTTTCCCACT CTGGATATTC TTCACCATTC TCATCTTTGA ATCGCAATTC 720  
 50 TTGTGTGAAG ATTTTCTGCA TATAGCCTTT TTTCTGTTGT TGAAGCAATT CAAGTTTTTG 780  
 TTCTTCTAAT TCAATTGTGC GGTGAGTTT GCTGAAGAAC TTGCCTATTT TTTGCTGTTC 840

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|    |            |            |             |            |             |            |      |
|----|------------|------------|-------------|------------|-------------|------------|------|
|    | TCGACTACCT | CCACTTTGTG | CAAGGAAAAAT | TTTCCTTTTA | CCTTTTCTTG  | ATAATAGATA | 960  |
|    | CTGTCCAAAA | AAATTATAAT | AATACTCTTT  | TTTCAATCTA | ATAATACATA  | CATGTTGATT | 1020 |
| 5  | TAAATTAGCA | TGCGTTTCAA | CTATCGAATT  | AATGGCTGTT | CTACCTATTG  | ATGCTCCTGT | 1080 |
|    | AATATTTAAA | AGAACATCAC | CATAGTACGT  | TCTACTATTT | TTCATCTCAT  | CATCTATATC | 1140 |
|    | TTTACTAATA | TAACTAAGT  | CATTAAAGATT | TAATTTACCA | TTTCTAATAT  | TTTGACTCCT | 1200 |
| 10 | TAAAAATGGT | ATGCCTTTGT | TTGTATAGTT  | TTCACTTCCA | CCTTTGGGAG  | TCTTTCCACT | 1260 |
|    | ACCTATTTTG | GTAGTAAGAT | TCCCTAACTT  | CTTCTCTTCC | CATTGCGCTT  | CAAATCCTGG | 1320 |
| 15 | GAATCTCAAC | TCTGGCACAT | TTTTCGTTTG  | TGTATTACTC | ATCTTTCAAC  | ACCCCAAGTT | 1380 |
|    | CTTTCAGGTA | TGCATTGATT | TCTTGTTCAA  | TTTCTGCGAT | TTCTTTGTCT  | ATATTTTTC  | 1440 |
|    | AATCTTGTG  | GACTTGATCT | AAATCAATTG  | GTGCTTCTTC | TTGGAATGTA  | TCAACATATC | 1500 |
| 20 | GCGGTATGTT | TAAGTTGTAA | TCGTTATCGG  | CGATCTCTTG | TAATGTCGCG  | CTGTAGCTAT | 1560 |
|    | ATTTATCAAT | CGTTGCTTTA | CGCTTATATG  | TGTCTATAAT | ACGTTGCGACT | TGGGCATCGC | 1620 |
|    | TTAAATGGTT | TTGATTTTTT | CCTTTTTC    | AATCATTGGA | TGCATCGATA  | AATAGTACGT | 1680 |
| 25 | TGTCGTCTTG | TTGGCGACAT | TTTTTAAATA  | CTAAAATACA | TGTTGGAATA  | CTTGTCCCAT | 1740 |
|    | AGAAAATATT | GGCTGGTAAC | CCAATCACGG  | CTTCTAAGTA | GTTCTTTTCT  | TCTATTAAAT | 1800 |
|    | AGCGACGAAT | CACACCTTCT | GCGGCACCAC  | GGAATAATAC | ACCATGTGGG  | aGTACGACTG | 1860 |
| 30 | CCATGGTACC | TTCATCGTCT | AGGTAATGTA  | CCATGTGTTG | AATAAAGGCA  | AAGTCTGCTT | 1920 |
|    | TGGaTTTTGG | CGCAAgCTTG | CCGTAACCAC  | TGAATCGTTC | ATCATTTTCA  | AATTTTGAAT | 1980 |
| 35 | CTGCTGTCCA | TTTCGCACTG | TATGGTGGGT  | TCGCAATAAC | CGCATCAAAT  | GTATTGCCTA | 2040 |
|    | AAAAGGCTGG | ATTTTCCAAT | GTGTCATCAT  | TACGGATCTC | GAAGTTCTCA  | TAACGCACAT | 2100 |
|    | CATGTAATAA | CATATTCATG | CGTGCTAAGT  | TGTATGTAGT | ATTGTTACGT  | TCTTGTCCGA | 2160 |
| 40 | AATAACGATA | CACCTGCGTT | TCTTTACCAA  | CACGTAACAA | CAATGAACCG  | GAACCACATG | 2220 |
|    | TTGGGTCGTA | CACGTGACGT | AATTTATCTT  | TACCGTCTGT | GACAATCTTC  | GCCAGTATCT | 2280 |
|    | TAGATACTTG | TTGTGGTGTA | TAGAACTCGC  | CTGCTTTTTT | ACCCGcTGTC  | GCCGCAAAGC | 2340 |
| 45 | GCCCGATTAG | GAATTCATAT | GCATCACCTA  | ACATATCAAT | TTCCATGTCA  | CTGTGAACGA | 2400 |
|    | ATGGTAAGTC | GTCAAGATTA | ACCATGACTT  | TAGAGATTAA | AGCAGTACGT  | TCTTTGACAT | 2460 |
| 50 | TGTTACCTAG | TCGCGTTGAA | CTCAAATCCA  | TATCGCTGAA | CAGCCCGATA  | AAGTCATTTT | 2520 |
|    | CACTTTCTTC | ACCTAATGTA | GATGTTTCAA  | CTTTGCGAAT | CGCCGTCGCT  | AGATGTTCTA | 2580 |
| 55 | TATCGAAATC | TTGCGTTTCA | ATTTACAGAA  | TCATCGCACT | GAATAAATCT  | TGTGGCTCAA | 2640 |

|    |                                                                    |      |
|----|--------------------------------------------------------------------|------|
|    | CCCATGCTTC TTGATACGTG ATGTCTTCAC CTGACAAGGC ATCTGCATAT TCTTGTTTCGG | 2760 |
|    | CTTTTTCAGA TAAGAAGCGA TAGAAAATCA AGCCTAAAAT GTAATTACGG AATTCACCTCG | 2820 |
| 5  | CATCCATGTT CCTCTTAAA TCATTGCGAA TCGACCATAA TTTTATATGT AATTCAGCTT   | 2880 |
|    | GTTGCTGACG TTGTTTTTCA GTAATAGACA TGTGATTCCT CCGCCTTTGC ATAAGTAATT  | 2940 |
|    | TATCTCTTTG TGTAATAGAT TTATTATAAC ATTTGGTTAT GTTGCGATGT TGATAATTTG  | 3000 |
| 10 | GATGTTGGTG GTGGAATTT TGAGTTT TAGGCGCAATT GTTATTGAAA AATTTTATAG     | 3060 |
|    | AAATGTTGTA GCTTTCAAAT GCTTTCAAAA TCATTTATAT TCTTAATGAT GTCAAAAAGT  | 3120 |
|    | TGTTCAATTCA TACATAAATA AAACCAATCA ACAATTGAGT TGGTGAAAAT CAATCGTTGA | 3180 |
| 15 | TTGGCTTTGA TGCATATTAA ATAATGCAAT ATATATTAAT AAATGTTAGT TATAGTATAT  | 3240 |
|    | TTTGTGAGGA TTGGGTGAAT GTCTAAGTTT TAATTATTTA TCTAAATTAT CTGCAATGAA  | 3300 |
| 20 | TTTCTTAATT TCAGGAGAGA AATAAACAGC AAATCCTCTT GTGCTTTCAC CTGATGGCTT  | 3360 |
|    | ATTACCGGCA TAGATTACAC CAATAGCTTC GTGTTTACTA TTTAATATAG GTGAACCAGA  | 3420 |
|    | GCTACCAGGC TGAATAATTG CATCCGATGA CACTATATTC CCATTCCTG ATAATACTTT   | 3480 |
| 25 | ACCAGTTGAT TCATACATTT GTAGTTTATT TCCATTAGGA TTTGGATAAC CAATGACTGA  | 3540 |
|    | TATAGGTTCA TTTTCTTTAG CTTCTGATGC TATATTAAAT TTACTAGTGA AATCTTTGAA  | 3600 |
|    | TTTTCTACCT TTTGGTTGTG TTGATTTTTC TTCAACTTGT ACAACCGCAA TATCTTCTTT  | 3660 |
| 30 | ACCAGGATAA TCTACAATCT TAGTAACTTT ATAAAGTCCA CCACCGTTAT TATAAAAACC  | 3720 |
|    | ATTAGGATGT GCTTTGATTT CATCACCGAC TTTCATGTGA TAGGTAACAT GTTTATTGGT  | 3780 |
| 35 | AATGATTGTA TGATTTCCAA CTACAAATCC TGTTCCAGCG CCCATCCATG TAACACCACT  | 3840 |
|    | GTATGGTGCA ACATTTGTAT TTGTAATTTG TTTAACAGTA TTTTCGGCTT TGGCTGTTTG  | 3900 |
|    | TTGAATACCT TCAACCATTG TTGTGCCGAC ACCAGTTATT GATGTTAAAA TCGTCAATGC  | 3960 |
| 40 | TGCAATACTT TTGATGATTA TATTTTTAT                                    | 3989 |

(2) INFORMATION FOR SEQ ID NO: 817:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 904 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 817:

|                                                                   |    |
|-------------------------------------------------------------------|----|
| CGTTGAGCAC AGTTTTAGAT AATAGATAAT CTTGCTCTAG TTGTTGCAAT GTCTGCGATT | 60 |
|-------------------------------------------------------------------|----|



|    |                                                                    |     |
|----|--------------------------------------------------------------------|-----|
|    | TATGCGTGTA ACGTTCAGTT ATCGTTTCTA AGGTATACTG AGATGTATTT AATTGATATC  | 180 |
|    | CTTTAGATTT AATACTTACG ATGATATCAT CCATAAAATT GCTATTGATA ACATGGATAT  | 240 |
| 5  | CATTGCGAAC TGTGCGGTTT GAAACATTGA CATGTTTAGC AATTTTCATTA GAACTAATGT | 300 |
|    | GCTTTGATGG ATTTTAAATA AAAAAGTGGG GTAGTTTAA GTGTCTATCA AGCATTTAAC   | 360 |
|    | ATGTACCTCC TTTCTAAATT TTTCGTGTAA GCGTTTAA GGGTGTATTA ATATTATTAA    | 420 |
| 10 | ACATGAGAGC TTATACATAC GTCAATGACA TTAAAGCGAA CTTTATATG ATTTAACAG    | 480 |
|    | AGTGCGAATT ATGCAAATAA AGAACAGCAG TAAGATATTT CAAATAGAAA AATATCTCAC  | 540 |
|    | TGCTGTTTTT CTGAATTTAT GCATCTGGTA CTTGTGGACG TATCAGGCAA ATGATTAATT  | 600 |
| 15 | TTTAGGTGAT TGTGCTTGAG GTGTTTGTG AGAAGGCGTA TTGGTATTAT TTGATTTATT   | 660 |
|    | AGCAGGTGGT GTGTTCTGTT GTTGATTATT TTGGTTGTT GTTGACGATT GACTGCCACC   | 720 |
|    | ACCGTGAGTA TTATTTTAT TTGAATTTGA GTCTTTTGGC TGAGCTGGTT GCGTATTGCA   | 780 |
| 20 | TGGTACTGTT GAATGGTTGT TAGGAACATT TGACGGTGAA GATGGTTGAT TGTCATTAGT  | 840 |
|    | AACGTTATTG CCATTATTTT GATTtTTATC TGTTTTGTCT GCACTATCAT CTTGTTGATC  | 900 |
| 25 | ATTT                                                               | 904 |

(2) INFORMATION FOR SEQ ID NO: 818:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1104 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 818:

|    |                                                                    |     |
|----|--------------------------------------------------------------------|-----|
|    | TTTAACatGa TAATAAAAAA TCTTTTGTTA TATCATTAGG AATATTTGAT GAACTTGATA  | 60  |
| 40 | TTAAGGTTAC ATTTTGAGAA ATGGACTTAG GGATATTTCC ACTATTATTT AGTAAGAAAT  | 120 |
|    | CTTTAGCTAA TAAAGATTTT CCTACACCAT TTTTACCAAC AATGTGATTG ATCTGACCAA  | 180 |
|    | GATAGAAATT TAAATCACAA TTGTCAACTA GTTGTGTTGTT TTAACTTTT AAAGAATAGT  | 240 |
| 45 | TATTTAGTTT CATGTATACA ACTCCTATGT ATAAAGGGAT TTATTACACC GATATTTAAT  | 300 |
|    | TGTATTTTAA AAAATTCTtT CACATTATGT ATAGAwGTTA TAAATTAGTA TATCaCACTA  | 360 |
|    | TATTTtGkCT AAATGATAAA TATATCGTTA TATTTTtTACA ATATTCTGAA ATTTATGTTT | 420 |
| 50 | GCCTCTGAAT GCTATATCCA GTGTAATGTG TTTTGCATAT ATGAAAGCAA TTTCAAAATG  | 480 |
|    | TGAATATAGG TTCATTGTGG TATGACAAAC TTCATTGCTT GTCATGAGAT GGATATAATG  | 540 |

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GACGGGACGT TTTTAGATTC AAAAAAGACA TATGATAAAC TTAGATTTGA AGCGATTTTT 660  
 ACTGAACCTTA GAAATAGAGA TATTACATTT ATTGCTGCGA GTGGCAATCA ATATGCGAAG 720  
 5 TTGAAGTCTA TTTTCGGGGA TAGAGATATG TATTTTATTT CTGAAAATGG TGCAGTTATT 780  
 TATAATGGCA ATGAGTTATA TAATTATAAA AGCTTTAATC GTCAGGTGTT TCAACAGGTT 840  
 GTCGATTACT TAAATATGAA GCAAAGTATT GATCAACTCG TCATCTGTGG TTTGAAAAGC 900  
 10 GCGTATATTT TAAAACATAC TTCTGAAGCG TTTAAAGAAG ATACGAGATT TTATTATCAT 960  
 CAGTTAAAAG AAATTGACAG TCTACAGCAA TTACCTGAGG ATGATTATGT CAAAATAGCA 1020  
 15 TTTAATATTA ATCGTGAGAC GCATCCGAAT GTTGACGAAG AAGTAGCAAC GCAATTCAGC 1080  
 AATGATATTA AACTTGTCTC AAGT 1104

(2) INFORMATION FOR SEQ ID NO: 819:

20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1425 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 819:

CCCnTTTTAC GGATTAAngG CTTTTTCCTA TTTAAACCT ACGGCATTTT CTTTTCAACC 60  
 30 ACGGCGGCTC CCATATGGAT GGTATnGGGA TTGGGGTTTA TAAAATGGGG ATTGGAAATG 120  
 GTCCATCCTA AATACTCAGT TTAGTGCTTA TTTCCTTTAG TGCTGACGAA TAAATATGAT 180  
 35 CTAACCTCTAC GAAACCTAAT AACGTATCAA ATGCTTCATC ACCATTTTCA AATTTACTTA 240  
 AACTATTTTT AAAATCATGT CGCAAATCCT CTAAATATAG TGATGGTTTT CGATCTACAT 300  
 ACATTTTTAT ACTAACCTCC GATATATAAT CATCTTTATT GTACCTAACA TTTTATTAAG 360  
 40 ATAATACTAA TACACTATCG AACTTTGGGC TGATACTGAA ACAGCACAAA GAAACTCAAA 420  
 CAATTCGAAT TATGTATCAA AACCTTCAAT TACAGGAAGT GATTTTAAAA TGATTTAACG 480  
 CAAAAAACA CCTGTTACCG TTATATAGGT ACAAGTGCTT AATTGATAGA GATGTTATAC 540  
 45 GTCTTTAAAT GATTCCACAA CTTTGGATG TGGACCATCC ATAAGCGGTT CTCTTTGTCG 600  
 AACGCCACCA CTTTGGTTGC CAATTGATTC GCTATCAAAG TACGATTTAT CTTGATTTGA 660  
 TTGTTCTTGA ATATGTTCTT CATTATCAGT TGTTGCATAT TCACTATCCA CCTCTGTTTT 720  
 50 TTCCATTGTT GCTGTATGGA ATTGTACGAA GTTCTCTTCT TCTAATGCTT TGATTTCTTC 780  
 TTTGATAAC GCTCGATACC AATCTTTCGC TTTTTTCGCC GCAaTAGGAa CAaCatCTTT 840

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TACTTCAAAT TCTTTCCATT TTTCGGGGTA ACCTTTCATT GTAAAGGGCA TTCCCTTAAC 960  
 CTCCAATATG TTATAATTCA TGTATATAC CACCATAATT ATAAATGAA ACATATTAAA 1020  
 5 CACAATTTTT TAGACTCCCG TCATAATAAC TTCAGACAAA CGTTAGTCTG ACCTGATAAA 1080  
 TATTTAATTT TAAACGTTCT TGTCTCTCTC ACGAAAACCA TTGTGTTGAA TATTCATCAT 1140  
 TGCTGATTGA ATATAATTAT ACTGTGGTAA ATCTGGTAAT ATCTTTATTT CTAATTCTGT 1200  
 10 ATTTAATTCG AAATGCTTAG CGATGTTTTT AAATATTGCT AAATACTCGC CCATTAATTG 1260  
 TTCATTTATT GTAAGTCTAT CTTCATTAGC CATGGCTCTA TTAAACATAA AGCTAATTTT 1320  
 15 TTCTAATGCG AATAAGCTAG GATAATAATT TTGAATCAAT GTCTTATCAC TAAATAATTC 1380  
 ACCATTAGCT GCATTATAAA CTTGCGTGCA TGTTATTTAA TTTGC 1425

(2) INFORMATION FOR SEQ ID NO: 820:

20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1165 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 820:

30 nCGnCCCTTAT ATATGTTTTT CATGTCCTAC AAAAAACGAA ATATTCCAAT TGCCTATATA 60  
 CAGATATTCA TTAATGACAC ACTCAATAGC AACCATnACA ATATTATGTT ACCTATTTAA 120  
 ATGAAATAGT TCTTTTAAAG AAATACATTT TTCACATATT AATCTATAAT CAAAATCAAC 180  
 35 TGACCGATAT TCTATAATTT ATGATTAAAA TAAGTTATAA TATAATAGTA AAGATAAAGA 240  
 TAGAGGTGGC TATAATGTGT GGACTTAGAA GTATAACATT AGGTACaACA AATATAGAAC 300  
 AGACaAAACa TTTCATGGTT GACATATTAG GATTAAATTA TGAAGAACTT CTTGAAAAC 360  
 40 CAATTCGTTT CGGCGATGCA GATATAAGCC CAGGAACAAG ACTTCAATTT ATACAAGTTC 420  
 CAAGTGAGCA ATTAGAAGAA TCTCACTTTG TGGGTATTGG ATTACGTACA CCAACTGACT 480  
 CAGGTTTAGA GGAGTATGCG GAAATATTAT CGAATAAGGA TATTCCATTT ACAACAGTTA 540  
 45 AAGAATTAAA TGGCAATAAA TATTTCAATC TCGAAGATAA CAATGGTCAT ATTTTCTCAA 600  
 TATATTCAAA CGAGAATAAT TATGGCGTTG GTTTAGGTAT GCCTTCTTyT GAGAGTGCGG 660  
 50 TCAATCCGTT ACATCAAGTG CAAGGTTTAG GACCAGTGAT TCTTAAAGTG AATCATGTAG 720  
 ATATTACAGG TCAAATTTTA ACAAATATAT TCGGACTTGA AGTATTTGCA GAATACCAAC 780  
 CCTTCGACAA TGCTGACTAT CATGTCCAAG TATTCAAAGT TGGAACGGGT GGTCTAGGTG 840

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ATCAAGTTGA GTTTGAAACG AAAGATGCAG ATTTCTTTAA TCAAGCGAAA TCGCGCTTAG 960  
 ATGAAGTGA AATACCATAT CAAACGCTTG AGCAAGATGA TATTGAATCA ATTAGAaTTA 1020  
 5 CTGAAAACAG TGGATTATCG TTTATATTCA CTTTACAAAA ATAATTTTTT TACGATAGCG 1080  
 AGGACAAAAT TTATGTTACA TGAAACTTGG AAAGAACGTA CACCAATCAA GAAAGTAGAA 1140  
 GTCATTAATA CAGATGCAAA GAAAT 1165

(2) INFORMATION FOR SEQ ID NO: 821:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 821:

TCGCCCAATT ATTATGAAAT ATTCAATACA GTTTATTGAT CAAAAACAA AAATCCATTA 60  
 TGAACCTTGT CATCACGAAT ATTAACGTAC GTTAGATGGA CCTCTTTAAT GATAGAACAA 120  
 25 TTAATAAATA ATGCACTTAA GTATGCGAGA GGTAAGATA TATGGATTGA ATTTGATGAG 180  
 CAATCCAATC AATTACACGT AAAAGATAAT GGTATCGGTA TTAGTGAAGG nACTTGCCTA 240  
 AAATATTTGA TAAGGGCTAT TCAGGTTATA ATGGCCAGCG CCAAAGTAAC TCAAGTGGGA 300  
 30 TTGGTTTATT TATCGTAAAA CCAATTTTCA ACACACACAA ACCATCCGTT TCCGTCGTAT 360  
 CTAACAAAT GAGGGTACAA CnTTACGAn TnCCATTTCC 400

(2) INFORMATION FOR SEQ ID NO: 822:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 760 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 822:

TGATATAATA CTTTTGTAAA GAAAAGCATG TGTGGGAGGT ATGACCTGTA TGTCGAACGA 60  
 AATACTTATC GTAGATGATG AGGATAGAAT CAGAAGATTA CTTAAAATGT ATTTAGAAAG 120  
 AGAATCTTTT GAAATCCATG AAGCAAGTAA TGGCCAAGAG GCTTATGAAC TTGCAATGGA 180  
 50 GAATAATTAT GCTTGCATAC TACTAGATTT AATGTTGCCT GAAATGGATG GTATCCAGGT 240  
 GGCAACTAAA TTGCGTGAAC ATAAACAAAC ACCGATTATT ATGTTGACTG CTAAAGGTGA 300

TTCACCAAGA GAAGTAGTCT TAAGAGTTAA AGCACTTCTA AGAAGAACGC AATCTACAAC 420  
 TGTAGAACAA AGCGAACCTC ACGCACGTGA TGTGATTGAA TTAAACATT TAGAAATAGA 480  
 5 TAATGATGCA CATCGCGTAC TTGCTGATAA TCAAGAAGTT AATTTGACTC CTAAAGAGTA 540  
 CGAATTATTA ATATATTTAG CTAAACACC AAATAAAGTA TTTGACCGTG AACCAATTATT 600  
 AAAAGAAGTT TGGCATTATG AATTCTATGG TGATTTAAGA ACAGTTGATA CTCATGTTAA 660  
 10 ACGcTTAGAG AAAAGTTAAA TCGTGTGTCT AGTGAAGCTG CGCATATGAT TCAAACAGTC 720  
 TGGGGCGTTG GGTATAAAATT TGAGGTAAAA TCTAATGATG 760

(2) INFORMATION FOR SEQ ID NO: 823:

15 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 465 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 823:

25 CAAAGGAAAT TGCACAATTA GAAGACCGAT TACGTTACG CTTTGAATGG GGGCTAATTG 60  
 TTGATATTAC GCCACCAGAT TATGAAACTC GAATGGCAAT TTTGCAGAAG AAAATTGAAG 120  
 AAGAAAAATT AGATATTCCA CCAGAAGCTT TAAATTATAT AGCAAATCAA ATTCAATCTA 180  
 30 ATATTCTGTA ATTAGAAGGT GCATTAACAC GTTTACTTGC ATATTACAA TTATTAGGAA 240  
 AACCAATTAC AACTGAATTA ACTGCTGAAG CTTTAAAAGA TATCATTCAA GCACCAAAAT 300  
 CTAAAAAGAT TACCATCCAA GATATtCAA AAATGTAGG CCAGTACTAT aATGTTAGAA 360  
 35 TTGAAGATTT CAGTGcAAAA mAACGTACAA AGTCAATTGC ATATCCGCGT CAAATAGCTA 420  
 TGTcTTGTcy AGaGAGCTTA CAGATTTCTC ATTACCTAAA AATTG 465

(2) INFORMATION FOR SEQ ID NO: 824:

40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 355 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 824:

50 CACCGCGGTG GCGGACGCTC TAGAACTAGT GGATCCCCCG GGCTGCAGGA ATTCGGCACG 60  
 AGGTAAGGAG GTCTCTGTAC CATGGCTCGT ACAAAGCAGA CTGCCGCAA ATCGACCGGT 120

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GGAGGGGTGA AGAAACCTCA TCGTTACAGG CCTGGTACTG TGGCGCTCCG TGAAATTAGA 240  
 CGTTATCAGA AGTCCACTGA ACTTCTGATT CGCAAACCTC CCTTCCArCG TCTnGTGCGA 300  
 5 GAAATTGCTC AgGACTTTaa AACAGATCTG CGCTTCCAnA GCGCACTATC GGTGG 355

(2) INFORMATION FOR SEQ ID NO: 825:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 1099 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 825:

TTCACCTGGC TTGTTGAcTG ACTTGTAAtAT GATGATGTGC TTTGTGAATC GGATTGCTC 60  
 20 GTGCTTGATC TTGTTGAGTT TGAGGCACTT TGGCTTGCTG AGTTTGAGTC TACTCCGCTT 120  
 TGATTCAITG AGGCACTTAG TGACAATGAT GTACTCGTTG AGTCAGACAA ACTTGTAATC 180  
 GTTGACGTAC TTGTACTTCC TGATGTTGAT TGAGACATAC TTATGCTCAT TGATGTTGAA 240  
 25 TCGGATTTAC TTTCACCTGA TGATGTTGAG TCGGATTCAC TTTCACCTGT AGAACCACTT 300  
 AATGATGTGG ATGTACTAAT GGAATCAGAT TTACTTGTAC TGATTGAATC ACTTGTCGAC 360  
 ATTGATGTAC TTAATGAATC AGACTTACTA TCACTTGTGG AATCACTTAA TGATGTTGAC 420  
 30 AAACCTGTAG AGTCAGACAA ACTTGTAATC GTTGACATAC TCAGTGATGT TGAAACACTC 480  
 TCGCTCTTAA ACGTTGACGT TGATTCACCTG ATACTTGTCTG ATGTTGAAAT GGACGTACTA 540  
 CCACCTGTTG AATTACTTAA TGATGTTGAT GTGCTACCAG ATTCTGATGT ACTGTCTGAT 600  
 35 AATGACGTAC TCTCACTTGT CGAACTACTC ACTGACTCTG ATGTTGATTG AGACGTACTT 660  
 TCACTTAATG ATTCACCTAA AAAGGCAGAT GCACCTTTGTG ATTCTGAATC GCTAGTACTA 720  
 TTTGATTCAC TTAATGATAT AAACGTGCTC TCTGAAGCAG ATATTGCTTC ACTTATAGAG 780  
 40 TCGCTCGTTG ACGTTGATTG ACTTATGAA TCAGACTCTG ATGTACTTAA GCTTGTGGAA 840  
 TCACTCaTAG ATGTTGaTGT ACGTTCTGAA TTACTTGTAC TTAACGATGT CGAAGTACTT 900  
 45 ACCGAACCAG ATGTGCTCGT AGAAGCACTT TgTGATATTG ATTCACCTGA TGCAGTTGAT 960  
 GCTGATTTGC TATCACTCGT TGAATCACTA AACGACGTTG ATATGCTCaT TGAATCGGAT 1020  
 TGACTTGCAc TCAnTGAACC AGACGTACTT TGTGATTCCG AAGTACGTAC TGAAGCACTT 1080  
 50 GTCGACGTTG ATGTACTTG 1099

(2) INFORMATION FOR SEQ ID NO: 826:

55

(A) LENGTH: 338 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 826:

10 TATGCGTATC CTGATAGTCA CTTTGATTTT GATATGGAAT TAGCGAAAGA GCAATCTCAA 60  
 GACAATCCAG TTTACTATGC TCAATATGCA CATGCGCGTA TTTGTTCAAT TTTAAAACAA 120  
 GCGAAAGAGC AAGGTATTGA AGTGACTGCT GCGAATGATT TTACAACGAT TACTAATGAA 180  
 15 AAAGCGATTG AnTTGTTGAA AAAAGTAGCT GATTCCGAnC CTACAATTGA AAGTGCTGCT 240  
 GAGCATAGAT CGGCACATAG AATTACTAAT TATATCCAAG ATTTAGCCTT CTCATTCCAT 300  
 AAATTChATA ATGCTGAAAA GTGTACCAGT TGGTATTG 338

20

(2) INFORMATION FOR SEQ ID NO: 827:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 838 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 827:

30

GTATTTTCTT TCGCGAATGA TTTTATTACT TGAATACCAC GAATAACCTC CAATACCTTT 60  
 TCCACTAATT GGTTTTGTAC ATTATGATAC GcTGCGCAT TTTGTCGACT CTTTCTTTCT 120  
 35 AATAATTGAA TCGCAAAAAA TGATAGTAAT ACGCCAATGC ATGCTAATAA TGATACTTGC 180  
 CACGAAACTA CAAGTAGAGA CAATATGAGT ACTGTAATTA ATATGTATCC ATTAACAACA 240  
 ACGTCCACCA TTTTCATAGC AAAGTTTTCT AAAAAGGTTA AATCTGTTGT TACTATTGTT 300  
 40 GTTAACTCAT TTGAATGATG CGAATTAAAA TAACCTAACC TTACATTTTT CAATTTATCC 360  
 CCTATATCTA AACGTTCTTT CGCACTCATT TCATAAGCGA TGCTCTCATG GCTTTTGCTT 420  
 TTGAAATATG CTGTAATAAA TCGTCCAATC ACTAATAAAA CCATGATAAT TACAACATTC 480  
 45 AATATATCTT TCATATAAAT AGGTTTATGA GATAGCACAT TATTAAATAT TTTTGCAGCT 540  
 AAAAAGATAG GTAACGCAAT AAAAATAGCA TTTAAAAATG ACATGCTAAA TCCTAAAATC 600  
 50 ATTCTTGCTT TATATGGTCT TATCCAGTTT AAAATTTTAA ATGTAATTG AAACATATTT 660  
 GACCTCCTTT TCTCATTAGT TTAATTATGT CCAGTATTGA TTCCCCAATC TTTTGATGCT 720  
 ATGTGCGTAT CCCACATTTT CTTATAATTA CCGTTTAATT TTAGCAATAA GTGATGTGAC 780

55

## (2) INFORMATION FOR SEQ ID NO: 828:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 898 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 828:

TCCnAAAGAA GAAATAaCAT TATCATaAAA TCCATTGAAT ATAAATTCAG TCATCCCCCTC 60  
 TGAACtCTC CATAAATATA ATGGTGAATA AGTATTTGTA ATGCAATTAG TAGTTGTTTG 120  
 ACTTATTAAA TAAGCTTTTA TAATTAAATT TTAAATCCA TCAGTCTTAT AACCATTTAA 180  
 TCGAACTCTA TCTCTAATTA TTTCCATATT GTAATCACTA GGCAACTTAA CATGATATTG 240  
 CATTGCATGC ATTTAGCATA CCCCCTTTTA TAAAAAGGAT AGCAATAATA AGTAAAATCT 300  
 CATATTATCC AATTGTGATA TAGTTATCAT AAAAAGTGAT AGGTGATTAA ATTGAACTTT 360  
 AATGATTTGG AAATTTTAT AACTGTATGT GAAGAAGCAT CTATCAATAA AGCTGCAATT 420  
 AAACCTAGAT ATGCACAATC TAATATATCT CAAAGAATTA GCAAGCTTGA AAATGAATTA 480  
 GGTGTAGTTT TGCTTTTATG AAATCAAAAA GGTGCTAAGG CAACTAAAGC AGGCGAAGAA 540  
 TTCTTAGCGT ATAGCAAAAA AGTATTAAGA GATACAGAGA CTATAAAAAA TAAAATGAAA 600  
 AATAATACTA TGTCTATTTT ATGCTCAGAA CTGTTATTTA ATTATTTATC TGAGAGCGAA 660  
 GAAATTATGA TGTGCAATAA CTCAATTAAT TTTATTTCTA GTGGAAATAT TAGAAAAGCT 720  
 ATAGAAAAAA ATAATTATGA TAAGGTTATT TCATTCATAA AAaTTAACGA CTCAAATTAT 780  
 AGACTTAGTA ATGTTGATAC TATGaaAGTA ACGCTTTACA GTAATGGAAG TAATTATGAT 840  
 AAAGAGGCTT TACTAATAAA TAAAGATGAG TTTGGTCCTT TAAGGnAAAT AACTTTAG 898

## (2) INFORMATION FOR SEQ ID NO: 829:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 798 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 829:

AGTAGGAGTC ATAAATCGn ATTTCAAAG CAATTAATGC AAAATACTGA GTCTACAGTG 60  
 CTATTTGCGA AAGCGTccAT ACGAAgTTGA GcAATGCTAA TAATAATGGT CTATCAAAAA 120



AATATGTTGA TAGTTACACT GATTCTCTTA CTGGAGTAAC AACTTCTGCT TTTTAAATA 240  
 AAGATACAGG CAAAGTAACT CTCGGGATGA CTGGGACTAA TTTACAAGAC GAAGCCTTTA 300  
 5 AAAAGTTAAA AGAAGGTGAA TTTTCAAGAC AAAATGTTAC CAATGCTTTG GAAACAGTTA 360  
 AAGATGGATA TGCAGATCTT AAAATATTAT ATTCTCTGTC ATCTGATCAA AACTATAGAT 420  
 ATGCGAATAC ACAAGAATTT ATAAATAAAA TAAAAAGTAA GTATGACATT GATTTTATTA 480  
 10 CTGGACATTC ACTAGGTGGA AGAGATGCGG TAGTTCTAGG AATGAGTAAT GGTATTCCGA 540  
 ACATTGTGGT TTATAATCCA GCTCCTATTT CTATAACTAG TTTGAATCCT AATTCCTCCAG 600  
 ATGGAAAACG TTTATTAGAA TTATATAAAA ATTATAAAGG TAATATTACT AGGTTTGTTG 660  
 15 CAGAAAATGA TGCATTGACA GAAAATCTGA AGAAATATAA GCATTATGTT TTTTTCGGTA 720  
 ATGATAAAGT CTTTAAAAAT GGTAAAGGTC ATGAAATGkA AGGctTTCTG ACCGAAGAAG 780  
 20 AACAAAAAGC tATAAAAn 798

(2) INFORMATION FOR SEQ ID NO: 830:

(i) SEQUENCE CHARACTERISTICS:  
 25 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 830:

AATATCAATC TCTTCATAAG CTGAATTATT TTCATGCACT TCTTGATGTG ATGATTTGTC 60  
 35 ACGAAChGCT ACAACTAACA TTTTATCGTC TAAAATAAGT TGTTTATATT TTTCTAATTC 120  
 ATCAGGCGCT AAGTTGTAGC GTGATAAAAC TGCATGTTCA CCATCTTCTC CTGTTAACAG 180  
 TTTAGTCATT CTATCACTAA ATGTTCCACT TGTGAGATA AGGGGAGATT TCAGAGTCGT 240  
 40 GTAAGTCATT AGGTGTAATT TACTTTTACT AATAATTGTT AGCCTGATCT AAATAACTTC 300  
 AGATTCTTTG ATTGATAnGT GnATAATCGC AGTGCATTAC ACAGAATACT GCCAAGTGCG 360  
 CCCTTAAAT TGTTATTAnC TTACCTCTAT ATAAGAACCC 400

45  
 (2) INFORMATION FOR SEQ ID NO: 831:

(i) SEQUENCE CHARACTERISTICS:  
 50 (A) LENGTH: 475 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55

AAGTCTGCAT GACTTTTATT TGCAAGTTCG ACTGCTTGAT CAAAAGCGCG ATGATCTTCA 60  
 GGATtAGCAC TTTGAACTGA GCTGAAATTC GGATCAGGTT TACATTGTGC TTCTACAAGA 120  
 5 TTAATTTGAT TGAAATTCAA AGATTGTAAT AACTCAGGTA CAATCGGAAC ACTTGTAACCA 180  
 TGCAAACTAG TGAACACAAC TTGTAAATCA GATTTAGGAA TATAGCCAAT CATATTTTGA 240  
 ATGTGTTTCA TATAGTCATC AGTTACAGAT TTCGGAAG GCTTGaTATA AGATGTATTT 300  
 10 TGTTTAGAAA tAGGTATATC AATCTGTAAT GGATCGCCAA CTTCTTCGAT ATAACGACTT 360  
 GCAAGCTCAG ATGCATCAGT CGATAATTGC GCACCATCAG AACCATATAC TTTGATGCCG 420  
 15 TTATAGTCTT TCGGATTATG ACTTGctGTA ATCATAATGC CAGCAGTAGT ATTAA 475

(2) INFORMATION FOR SEQ ID NO: 832:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 724 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 832:

CTTGAATTGA AGGATACGCA AATGATGCAT AATCAGCTTC TGTATAAAGC TGTAATGTAA 60  
 30 TGTCATCAAG GTCACCTTTT CTAACAAGCA CCTTATTAAT AGAAGTATGA TTCGCTTGCC 120  
 AAGTACCTTG ATTATTTTGT TCTAAATGAA TGACTTCGCC TAACGATTTT AACGTAATAT 180  
 CTGCACGCTC GTCTTCGCTA ATAGTATATG TCTTACCATC TCGCAAATTG AGCATCTTCA 240  
 35 ATTGTTTGTT ATATTTTATA ATCAATTTAT GCATTGTCTT TGCCTCAGTC CTATACTATT 300  
 TTTTCTTTT AGCTTCTTGG CGTTTTTCTT TATCTTTTGG TGCTTGTCTT TTTTGTTCCT 360  
 TTTTCGTTCTC TTCTTGTTGC TTTAATTTCT CATCTTTCGC TTTTGCTTTC TCTTCTTCAG 420  
 40 ATTTTCGCTTT TTCATCTTTA ACTTGTTTTT CTTTGTCTAA AATATCTTGC AATTATCGT 480  
 TATACTTTTT CGTTTCTTCA GAACGTTTAT CATTCGATAA ATCTCCGTTA TTTTAAATCT 540  
 CATTTAATTT ATTAATCAAC GCTAACTTTG TAATATCGTT ATCATCTAAA TAAGTGCGAA 600  
 45 TATTAATCGC TTCATCAAGA TGTCTTGTC CTAATCCAT CCAATATAAT AAGTAGTCTT 660  
 TGTTTGAATT TGGTGTCACT TATTAAAGTA AATTTTCTTT CGTATCTGTn TCTAAACnT 720  
 50 GTTn 724

(2) INFORMATION FOR SEQ ID NO: 833:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 994 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 833:

|    |                                                                     |     |
|----|---------------------------------------------------------------------|-----|
|    | AGCAGTTTGG CTCGTAGAAA TCTCCCGTCT CTATTCTATG TATTAACTTT TATTATATTT   | 60  |
| 10 | GTTATGATAC TATCGATATG AAAGCGTTGT CAATGGTTTT TGTAAAAATT TTGTCAAATT   | 120 |
|    | TAATTTTCA AGTCTTTATA AAAGTAGTTT AATTTGAAAA CTAGAAATAC CAATCCTAAC    | 180 |
|    | TAATTTATTT ATGACGCTCT TTTGTTTAAAT TGACATTCTT CAGCCATATT TTTTATGACT  | 240 |
| 15 | AGTTGCATTT TTTACTAATA AACACCTCTA AAACCTTAAAT GATTTTAAATC GTTTTAGAGG | 300 |
|    | TGCTAATTAT TTTATTTGAT TATTTTTTGT TTGATACCTA CTGCATATCC CATATGAAAA   | 360 |
| 20 | CGGCTTTTTT ATTATGTTAT ATGACTAAAT CTCGTGAAAA ATGAAATTTT TGCAGACTTA   | 420 |
|    | TGATTTACCA AAGTTTATCA TAACTAGTAG TTACATATTT CGCTCCATTT TTAACAGCTT   | 480 |
|    | CATTGACTTC ATCTATTGTA TTAATTAGGC CACCTGCAAT GACTTGTGTG TTTGTTTCTT   | 540 |
| 25 | TCTGAATATG ATGAATCGCT TTACTCGCAA CACCTGGAAG TACTTCAACA AAATCAGGTT   | 600 |
|    | CAACTTTTTT TATCAAATCT ATACTGCGTT TCAATGCTTG ACTATCAATA ATAAATACTC   | 660 |
|    | TAAAAATCGT TAAAGTATTT AATGATTTAG CTTTTTTTAT TACTTTAGAT TTAGTCGATA   | 720 |
| 30 | CGATACCTTT TGGCTTGTAT TGCTGAATAA TAAATTCAC TGCAAATTCA TCGTGGCTTA    | 780 |
|    | AACCTTTTAT CAAATCTATA TGAATAAAAC ACTCTATATG ATTTTGCTTC AGCAATTCCA   | 840 |
|    | TAATACTTTT TATATGTCCT ATATGCATAT CTAGAAGCAC ACACATTTTA TAGTCTGTnT   | 900 |
| 35 | TAATCCAGTT TCTCTAAATC nTTAATGTTT CCTATAAGCA GGCAATATGT TGTTAATTCA   | 960 |
|    | CTnGATCCAT CCTCTCTACA TCACACGCTT AAAT                               | 994 |

40

(2) INFORMATION FOR SEQ ID NO: 834:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 783 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 834:

|    |                                                                   |     |
|----|-------------------------------------------------------------------|-----|
| 50 | TCnACAAAGT CGGTATTAGG CTATGGGCCA TTnACTATT ATAATAATC GGAAATATAC   | 60  |
|    | CACATAACAT CATTATTGAG TTGATTCTAT CATTGGCTT ATTAGGGTTT TTTATCATAA  | 120 |
| 55 | TGATTGTCAT TTTGCTACTA GTTTATAAAA TGATTAGGAA CTATGATCCA AACACTATAG | 180 |

ATTTAGTTGT AAGTGAATTT TGGTTTGTGT TGTTCATTTT TATTACAAAA GGACGGCGTC 300  
 ATCATGGCTA AGAAAGTTTT TATTATGGAT AGCGTAAAGA CAATAATTGG TACGTTGCTT 360  
 5 ATAGCTTTAG GATTACAATT TTTAGCTTAT CCAATTATTA ATCAACGAGT AGGTAATGAA 420  
 GCGTTCGGTT CTATTTTAAC GATTTATACA ATAATAACAA TCACGAGTGT TGTATTAGGC 480  
 AATACGCTTA ACAATATACG mTTGATTAAT ATGAATCTAT ACAAATCCAA TCATTACTAC 540  
 10 TGGAAATTG CATCGATACT TTAAATCTCA ATTCTGATTG AGAGTATAGC TTTAATTATT 600  
 GTATTTCTTT ACTTTTAA TTTGAACATC ATCGATATTA TCTTTTAAAT TCTACTTAAT 660  
 15 ATTTTAATGT GTTTAAGGAT TTATCTGAAT GTATTTTAA GGATGACTTT AAAATATAAT 720  
 CAGATTTTGT ATATTGCTCT TATTCAATTT TTAGGTTTGC TGATAGGACT ATTTCTATAT 780  
 nAT 783

20 (2) INFORMATION FOR SEQ ID NO: 835:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 794 base pairs  
 (B) TYPE: nucleic acid  
 25 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 835:

TTACCTAATT TTTCAAtCaT AAGATTCCCC CTATTGTTTA AACaTAAAAA TATTATaCGA 60  
 TTAAGCACGA GmCACTTCAA TATATTTTTC AGAATATTCT TATAAATATT AATATGATCA 120  
 35 TTTCATATT TAAACACGTT TAATATTAAA ATAAGTTATT CATATAAACT GGTGCTGTTT 180  
 GATCCAATTG CAGACTTACG AGTCATTGAA AAGTCTCACA AACTATTGmA AGTAAAtATC 240  
 TTAATAAGTA AAGTGAATGG TTAATTTAAG TATATTTmAA AAATATTAAC CTTTTTAAGC 300  
 40 ACTGCTATTT AGGATATACT AAATAATAAC TAAGTTTAGA AAAATAGGAG GAACATCGTT 360  
 TATGTTAAAC AAGGTTTGGT TCCGAACGCG CATCGCTCTG ATTATGCTGT TCATTCTCAT 420  
 CAACTATTT ATGGAAGTGC ACGAAGTATT TACTCCAATA GCTACAATCA TCGGTTCTGT 480  
 45 ATTTCTTCCA TTTTAAATTA GTGGTTTTTT ATTTTATATC TGTCTACCTT TTCAAAACTT 540  
 ACTTGAAAAA GTCGGTTTTT CAAGATGGGC TAGTATAACA ACAATCATGT TAGCTTTGTT 600  
 50 TGCTATTATC GGCTTAATTG TTGCGTTTGT TGCACCAATC ATCATTTCOA ATATCAACAA 660  
 TTTAATTAGT CAGACACCTG gCCCTACAAA AAGGAAGCAG AGCAAATTAT TAAATTCGCA 720  
 CTGGCTCAAA TGGnTAAATT ACCTGGAGGA TGTAACCAng TGGATTACCA ATATGGTAAA 780

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## (2) INFORMATION FOR SEQ ID NO: 836:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 836:

TGTTTATACT GTGCCTGAAT TAGAAGAGGT TTAAACACCT ATGAGACAAG ATGGAACCTG 60  
 TGATATTTAT GTTAATTTAG AAAATGTGAG TtATATGGAT TCGACAGGTT TAGGTTTATT 120  
 CGTAGGTACA TTAAGCAT TAAACCAAAA TGATAAAGAA CTATACATTT TAGGTGTGTC 180  
 AGATCGTATC GGTAGACTAT TTGAAATTAC TGGTCTTAAG GATTTAATGC ATGTTAATGA 240  
 AGGAACGGAG GTCGAATAAC ATGCAATCTA AAGAAGATTT TATCGAAATG CGCGTGCCaG 300  
 CATCGGCAGA GTATGTAAGT TtAATTCstT TAACACTTTC tGGCGTTTTT TCGAGACTGG 360  
 TGCCACATAT GATGATATTG AAGATGCCAA GATTGCAGnT 400

## (2) INFORMATION FOR SEQ ID NO: 837:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 837:

ATTGATCCAT TTTGCGGTTT GGGTACAATA GCTATAGAAG CTTGTTTAAAT TGCTCAAAAT 60  
 ATCGCACCTG GTTTTAAATCG CGAGTTCGTA TCAGAGCAAT GGAACATCAT GCCAGCAAAT 120  
 ATTTATGATG ATTACCGTGA TGAAGCGGAT AAGATGGCTG ATTATGATAA AGAAATCGAA 180  
 GTATATGCTT CTGATATCGA TCCAGAAATG GTAGAGATTG CTAAGCGTAA CGCTGAAGAA 240  
 GTTGGGTTGT CTGATATTAT TAAATTTAGT GTAAAAGATG TCAATACATT AACAATTGAT 300  
 ACAGAAGAAC CGGTGGCGTT AATTGGAAAT CCTCCATATG GTGAACGTAT TGGTgaTCGT 360  
 GAAGAAgTtG AAGAAaTGTA CCGTTATATT GGTAAACTAA TGAAACAACA TCCATTTTTTA 420  
 TCTACATACA TTT 433

## (2) INFORMATION FOR SEQ ID NO: 838:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 926 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 838:

|    |                                                                   |     |
|----|-------------------------------------------------------------------|-----|
|    | ATTGGGCCAA CTAATCCTGT ATATCCAAAT CCAGCAGACA ATGGTGTTCC TTAAACCTGA | 60  |
| 10 | AGAACGTAAG CAATGATTCC AGTAATTATT CCATTTATAG TCAATGGTAT CGAAATAATT | 120 |
|    | AAATTTTTC AAGTAACTGG GATCATCATT TTTGCAGCTC CTATGAGTAA AACTGCATTT  | 180 |
|    | ACACCAATAG AATTGACACG CAATGAGCCA AATAAGAAAG TAACACAGGC AGCCACTATA | 240 |
| 15 | CCTAGGTTTG CTGCTCCACT TCCTAGTCCG TTAAACTAA TCGCAGTTGC AATCGCTACT  | 300 |
|    | AACGATATTG GTGTTACCAT TAATAATGAA AATGCCACAC TAATAAGTAT AGACATTAAC | 360 |
|    | AACGGATTTA AGTCTGTAAA AGAATGAATT ACATTTCCAA TGCTTGAGT AATTTTTCGA  | 420 |
| 20 | ATGTAAGGTA ATGTGATTAG ACCGATACCC CCACTAACGA TAGGTACTAA AACTGGTAAT | 480 |
|    | ATAATTAATT CAAAAGATCC AAGTTTGTTC TGTAATACCA TATATATAAG ACATGCAATA | 540 |
| 25 | ATAACAACCA AACTCGTATT TATAATGtCa CCTATACCTT TTAACATAAA ACTATTATTG | 600 |
|    | CTATATACAA CAGCACCTGA ACCAATCATA GCTGATGTAC CTACTATAGC AGCACCTGCA | 660 |
|    | CCATTAAATT TAAATTGATG AGCAGCTAAA ACCCCAATAA TAAATGCCAT AAATGATTGA | 720 |
| 30 | ATTAGTATCA CTAACGATA CGTTAATTCT AAAATTTTCAT TACCCTTTT AAATATTTTt  | 780 |
|    | AATACTTCAC CTAATAAAGC ATTCGGAACA AGTGCAATAA CAACACCAGC ACCAATAGAA | 840 |
|    | TTTAAAATCT TACTGAAAAA CTGTTTATTA TCAGCATTAT TTGCGTTACT CATAAACGAC | 900 |
| 35 | CTCCAATTG AACATTAnAC TCATCA                                       | 926 |

(2) INFORMATION FOR SEQ ID NO: 839:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 839:

|    |                                                                   |     |
|----|-------------------------------------------------------------------|-----|
|    | CTTCGAAACG TACTTGGTCA TTCCCTTTAC CAGTACAACC ATGTGCAATA CCTACTGAAT | 60  |
| 50 | TTGTTTTCTC AGCAATCTCT ACTAATTTT TAGCGATTAA TGGTCTTGAT AAAGCTGAAA  | 120 |
|    | CTAATGGATA TGCATTTTCA TACATTAAAT TTCCTTTGAT TGCATAACTT ACATACTCAT | 180 |
| 55 | CACTAAATTC TTTTGTGCA TCAATAATAT GACATTCAAC TGCTCCATA TCTAAAGCTT   | 240 |

CGTATCctTT GTCGATAAGC CATTGAACGG CCACACTTGT aTCTAGtCct CCKGAATATG 360  
 CTAACAAT TTTCTCTTTC ATAAAATTCA CCTCATTGTA 400

5

(2) INFORMATION FOR SEQ ID NO: 840:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1043 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

10

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 840:

GGATCGCGGT GTTGTGCTTG ATATACTTTG TAGCGATAAC GTTTACCTAC ACAATCATAA 60  
 CGACAATGAA AATCGTCATC GACTGTAACT ACATTGTTGA CATAAATATC ATCAGGTAAC 120  
 GTTCGGTTCA TTGCATATTG CCATTGTGAC ATAGGTATAT TCAGCTCTGT GTCGAAATGA 180  
 AAGTATTGCT GTATCGCATG TACACCTCTA TCAGTCCTAC TTGAAGGATG GATTCTCACA 240  
 TGTCTTTTAT GCATGCGTTG TAATAGCTTT TCAAATTGTT GCTGTACCGT TCGACCATT 300  
 TGTTGAATTT GAAAACCTAG AAAATTATTT CCTTGATACG CAATTTCTAC TAATATACGC 360  
 ATGAATTTAC ACTCCTGAAT ATTTTAATAC GAATAAAATA ATTGCAATTG GGATAATCAT 420  
 GGTTAAAGAT ATCGTATCTC TCAATTGCCA TTAAAGCTGT CTGTAGCTCG TTCTCTTAAC 480  
 ATTGGCATCA TAACCCCTAA CTTCCATTGC GACCGCTAAT TCTTCGGCGC GTTGAAAGC 540  
 TGAGATGAAT AGTGGCACTA GTAATGGAAT AAATGATTTA ATACGTGTTG CAATGTTCCT 600  
 TGAACCTATT TCAGAACCCAC GCGACTTTTG CGCCAAAATG ATTTTATCTA ACTCATCCAT 660  
 TAACGTCGGG ATGAATCGTA ACGCAATGGA CATTATCATA CTTAATTGAT GAACTGGTAA 720  
 TTTAAACATC tTTAGTGGTG CAAGTAATCT TTCAAACGCA TCTGTAAAT CAATTGGACT 780  
 TGTAGATaGT GTCaTAATTG TTGCAATCAT TAcAATCCCA ATTAAACGCA GTGrTATATA 840  
 TAGCCCTTCT AAAATACCAT TAGTTTCAAT CGTGATGCCA TGCCATTCAA CTAATACATA 900  
 TCCACCTTTA GTTAAAAATA TATGCATCAT TAATGTGAAG ATTAAAAAGA AAAATATTGG 960  
 TGTTAAACCT TTGATTAGGA ACCATAATTG AATTTTGTCT AATCTCATAA TGAAnAnGAT 1020  
 AAGTGCAAAC ACCCAAAGAT ATG 1043

50

(2) INFORMATION FOR SEQ ID NO: 841:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 343 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 841:

5 TCGAAATCAA ATTATAATAG ACAATTTTAG GAGGTGGACT TTCGATGACC AAAGGAATCT 60  
 TAGGAAGAAA AATTGGGATG ACACAAGTAT TCGGAGAAAA CGGTGAATTA ATCCCTGTAA 120  
 CAGTAGTAGA AGCTAAAGAA AATGTTGTAT TACAAAAGAA AACTGTAGAA GTTGATGGAT 180  
 10 ACAACGCAAT CCAAGTTGGA TTTGAAGACA AAAAAGCATA CAAAAAAGAT GCAAAATCTA 240  
 ATAAATATGC TAATAAACCA GCTGAAGGTC ACGCTAAAAA AGCTGACGCn GCACTGAGAG 300  
 nTCCCCTCAT AATTTCCCCA AnCGTAACCA TGTGTGAATA AAT 343  
 15

(2) INFORMATION FOR SEQ ID NO: 842:

(i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 430 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 842:

ATGAGTATTT TAATGATGCG CTACGAGCGT ATGGTCTTAC TGTGAnAACA GGTGAATTTG 60  
 GAACACACAT GAATGTTAGC ATAAATAATG wtGGwCagTC TCTGGTAGTT TAGAATTAGA 120  
 30 AGAATTAAAG CAATTTAGAC AATGGGGTTC TAAACACCA GGTCAATCCTG AATACAGACA 180  
 TACAGATGGT GTAGAAGTTA CTACCGGACC ACTTGGACAA GGTTTTGCTA TGTCmGTAGG 240  
 ATTMGCTTTA GCAGrAGATC ACCTAGCAGG GAAATTTAAT AAAGAAGGAT ATAATGTTGT 300  
 35 AGATCATTAC ACATATGTAT TAGCTTCTGA CGGTGATTTA ATGGAAGGTA TATCGCATGA 360  
 AGCAGCTTCA TTTGCTGGAC ATAATAAATT AAGTAAATTA GTTGTTTTAT ACGATTCAAA 420  
 40 TGGATATTTT 430

(2) INFORMATION FOR SEQ ID NO: 843:

(i) SEQUENCE CHARACTERISTICS:

45 (A) LENGTH: 329 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 843:

GGACTGCCCC ATGATTTGAC AAATGAATTG CTGATTTGAT TTATATATTA TCTGnAATTA 60  
 55



TCATCTATCC AACAAATATGT CTTATCAATG GTATAGTCTT TGCACACCAA TGGAGGnAAA 180  
TAAATCTCAA CCTTACTATA TTAATATATA ATCAAATCTT AGATTAACTA GTGTAATGAT 240  
5 ACAGATGGAT AATTGAGTAC AAATTTAAAA CCCTGAGATT TTCGCTTTAA TTTGAAAACC 300  
TCAGGGnTTA TTTGATTTTT ATATAATGA 329

(2) INFORMATION FOR SEQ ID NO: 844:

10 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 844:

20 AGATGAAGAA AGTGTTCAT CGATTATCTT AACAGTTGTT GCTTTATATA CTACAnTTCT 60  
TCCTAGATCT TGTACCGTTG AAAAGAGACC TGGTTGTAATG ACATTTTCAA 120  
TCACCACCCA GTCATCAACA TTAAAGTTGC CATCTGATAT ATCTCTTTCG ATTGTATAA 180  
25 ATTTCTGTTT ATCTATTGCA TAAAAATTGTA TCCATTCTCC TGCTTCGTAC ATTGACATTG 240  
GTTACGCTC GCTGCTAAAT ACTTTTAACG GTGTGCGTCC AATAATTGTC CATCCGCCAG 300  
GGAAATCTGA TGGGATATAG TCCTGTTTGA TTATTCGCAA TACCTACAGA ACCTGGCATG 360  
30 AATTTTTTAA CCTTGGGChG ATTACGTCTA nGGnGTATGT 400

(2) INFORMATION FOR SEQ ID NO: 845:

35 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 535 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 845:

CATAAGTCCA GTAACCTTCA ACTGTGTCCT CATCTTTAGT TCCAAATATA TCAACGTATT 60  
45 TATTTCTTAA CTGATTAATG TTTCCCCAAC TCTCGGATCC AAACACTTGA ATATGACTAT 120  
ACCAAACCCA CGTTTGCAAT GTTGCATGAA TGCTACCATT GGGCTTTTGC CATAACCATT 180  
TTCCAGATAA TGAAAAATGC GGCTGAGTGT AATATTTGAT TAGTTCATTG ATATTAGTCT 240  
50 CGTTTTCACT GATATTATAG GCTTTTGCTT CAGATGAAAA ACTGATTGGT GTTTTAGGAA 300  
GTGTGTTGA TGTAGTTTCT AAAAGTAACA ATGCTGTTGA TAAACTAAT TTATTCATGA 360

55

ACCGATTCCG AATTAAATAA AAGCTAAAAC TATGTTAAAT AAACCTAAAC AGTTAGTAGT 480  
 GTTATTTAAG CAAAACCTTAT CATTTTTAAG TTGGACAGAA CAGATCAATA AGAGC 535

5 (2) INFORMATION FOR SEQ ID NO: 846:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 509 base pairs  
 (B) TYPE: nucleic acid  
 10 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 846:

TCAATCGATC AAATGGTGAT TGACCTTTTA AATTGTATG ATCAAAATAA TGATTGTTGG 60  
 CCATATCTTT ACTATGCTTA CGTGACGTTT CAGAATTCTG TTTAGAATAC TTCAATGTAG 120  
 20 ATAATTGATG TTGTTTTCTT TCAGCATTAA CTAAATCAAA ATTTTGTAGT TCAAAACTAT 180  
 CTGCAAGCGA TTTGATGGT GTCATCATTT GTTCTTTTAA TCTATTTTCC ATAGCATCAC 240  
 TTACTTGTA AAGAGCTGTT ACATTATTAC GTCGATGCTT ATCATAAAAT ACCGTCGTAT 300  
 25 AAATGTGATT TTTATGAAA ACATCATATT CTTTATTATT TTGTTTCGTAA CGCACTCTAC 360  
 CTTTAACAAT CTCTGTTTCT GGTTCGCCTA ATCTTGCCT TACAACCGAT TTAGGTGTAT 420  
 TGTATTTAAT TTTTGATTTT GAAGTGATTA TATTTTGATT TGTATATAAC GCATTAACCT 480  
 30 TATCTTTCAT GTAACCTATC ATTATAAAA 509

(2) INFORMATION FOR SEQ ID NO: 847:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 847:

CGTATTGATC TATAAATAGT GTTTAGATGC TATAGTCGGA TGCTTAAGTA ATTTAAAGAA 60  
 45 AGTATCTTTA ACATCGATGT GTGTATAATC ATTTTGTAGG GTATTATAAT CTTTTTCTTC 120  
 TCCCTTCTAA AATATATACA GGTGCTTCAT CAGCTAGTGG TTCAACTGGA ATGTCAGCAT 180  
 AAACCTTCGCA TCATATGTTA AACAAAAACG ATTGTATCTG TACTTCACCT ATAACAGCAC 240  
 50 TATCCAATTC GTGCTTATCA AATAAACTAA GATTTTGTG AGTACCTTTT CACAACTAGT 300  
 ACATACGTCT TGAGTTCTGA AGCATCATTT CATAAGGAGA ATACTGGCCA CGTGTGGACT 360

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## (2) INFORMATION FOR SEQ ID NO: 848:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 848:

TACCACTTGA ATACATTGCA TATAAAATAC GACGTTGTAC TGGTTTAA A CCATCACGAA 60  
 CATCTGGCAA TGCACGCTCT TGAATAATAT ATTTACTATA TCTTCCAAAG CGATCACCTA 120  
 AAACATCTTC AAGTGATAAA TCTTGAATTA TTCTACTCAC TAGATTTCCT CCTCATCAAA 180  
 TTGATCATTT TCAAGCACTT GTACTTCAGA ATTATCTAAA ATACTTTGGT CCTCTTGCAT 240  
 ACCAAACTCA ACATGCTTTT CAATCCATTC ACGTCTAGGT TGTACTTTGT GCACCCATTG 300  
 AATGTTGTTA CACGTTTAGA TGGAACGCAC TTGCATCTTG CAACTTGTGA CACGnATTGA 360  
 AAGTTnCGTG TTTGCGGGGG TnTnCGCGTC GTTTGCCCAT 400

## (2) INFORMATION FOR SEQ ID NO: 849:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 849:

TTTATATGAT TTATTTGAGG AGTTAAGAGA TTTATTTAAA GAAGAAGATT TAGAACCATG 60  
 GACATCATGC GAATTTGATT TTACAAGAGA AGGTGAATTA AAAGTTTCAT TTGATTATAT 120  
 TGATTGGATA AATTCAGAAT TTGGTCAAAT AGGTCGACAA AATTACTATA AGTATAGAAA 180  
 ATTTGGAATT TTACCAGAAA CGGAATATGA AATTAATAAA GTTAAAGAAA TCGAGCAATA 240  
 TATTAAAGAG CTAGAAGAAT AACTATCTT AATGTAAGAC TAAACAATAA AGCTTTGTTT 300  
 AGTCTTTTTT GCGTTTAAAGT AAAAAGCaAT AGATACCGTA AAGTTGATGC TCATCAAATA 360  
 ATAATATAaa GATAATTTTA GGTTTTTAAA CTTTTAATCG 400

## (2) INFORMATION FOR SEQ ID NO: 850:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 923 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 850:

5 CAGGCCATAC TTACAATTTT GGCCATCGTC CGGATGTATT nGGAATCGTT GGATAATAAG 60  
 CATCAAGGTC GTGACTATTT CGTAAAATTC CAACTGTCCC AGAATTTACA TCATTATGTC 120  
 CAATTACTGG GCAACCaGAT TTTGCCAACT ATCTATATtT CaTATATTCC aAATGTTAAA 180  
 10 ATGGTTGAAT CAAAATCTTT GAAATTATAC TTATTTAGTT TCAGAAATCa CGGTGATTTT 240  
 CACGAAGATT GTATGAATAT TATTATGAAT GATTTGATAG AGCTTATGGA CCCACATTAT 300  
 15 ATTGAAGTCT GGGGCAAGTT CACACACGTG GTGGAATTTT TATTGATCCT TATACAAACT 360  
 ATGGACGTCC AAATTCTAAA TATGAAAAAA TGGCTGAGCA TCGTTTGATG AATCATGATT 420  
 TATATCCCGA AAAAATAGAT AATCGTTAAA TGTATCATTT AATAAACACA CCAATAAGTT 480  
 20 GATTTTCCTA ACTTATTGGT GTGTTTTTCA TTTAGCATAC ATAATAGGTT ACATTAAAAT 540  
 AACATTTTAT ACCAAAGTAC ACCAAAAGAA TATTAGTACA CGAATTAAAC AACATTTTTA 600  
 TAGAAACCTA TTGCACTTTA ACGTCAATAA GTATATTTTT ATATTATCTC TAATTAATTG 660  
 25 TCGCGCTTA ATAACAGAAT ATTCTCAATA TTTTATTTT TTTGTGATTT GTTGAATAT 720  
 TTAGTTGATA AGGCACAATC AAATTTACTT AACTATTGT ATTAGGGGAA GAAAGGATGG 780  
 GATGTATACA TGACACAACA AAACCCCAT GGAAATCAAA TTCAAGACAT ACCTCAAACA 840  
 30 GGATTTTTCG GGCATCCTCG AGGACTAGGC GTACTCTTCT TTGtAGAGTT CTGGGrAAGG 900  
 KTTAGTTATT ATGGGCATGC GTG 923

## (2) INFORMATION FOR SEQ ID NO: 851:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1004 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 851:

45 TTAnTTGCAT CTATTTcAGT TGGTGTAAG AAAGCGGAAT TTGATTTTAT TGAAAAGTTA 60  
 GctCAAGAAA AATTAATCCC CgAATATATT ACAATAGATA TTGCGCATGG TcACTcAGAT 120  
 TCaGTGATAA ACATGATTAA ACATATAAAA ACCCATATAC CTGATAGTTT TGTTATTGCT 180  
 50 GGTAATGTTG GTACGCCAGA AGGTGTTAGA GAATTAGAAA ATGCTGGTGC TGATGCTACC 240  
 AAAGTCGGTA TAGGTCTCGG TAGAGTTTGT ATTACAAAGA TTAACACAGG TTTTGGTACT 300

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5 GCGGATGGTG GTATAAGAAC GCATGGCGAC ATTGCTAAAT CAATTAGATT TGGTGCATCA 420  
 ATGGTCATGA TTGGTTCATT WTTGCGGCA CACGAAGAAT CACCTGGTGA AACTGTAGAA 480  
 10 CTTGATGGTA AACAGTATAA AGAATATTTT GGTAGTGCAT CTGAATTTCA AAAAGGCGAA 540  
 CATAAAAATG TAGAAGGTAA AAAAATGTTT GTAGAACATA AGGGTTCATT AATGGATACC 600  
 TTAAGAGAAA TGCAACAAGA TTTACAAAGC TCAATTTTCAT ATGCCGGTGG AAAAGACTTG 660  
 15 AAATCATTAC GTACTGTAGA TTATGTTATT GTTAGAAACT CTATTTTCAA CGGTGATAGA 720  
 GATTAATATT TATAGTAGGT GAKGTAAATT AAAAAATTCA TAGTAACTGT TGTTCGTTTT 780  
 TTATCAATTA TTATCATTGC GCCAATAACA GAATTTAAAC CATTCAATTCA TTTACAAAAT 840  
 20 GAAGTAAGAC AATATATTGA CATTACATC AATAAGAGAA CAATTTCTGC GGAAATAAAA 900  
 TTGGATACAC CGAAGAAACA ACAATTTGCC TTTAATAATA TACAAATGAA CATGTCGAAA 960  
 TCAGATGTTG AGAAAACATT AAATAAACCA AAAAGAGTGA CATn 1004

(2) INFORMATION FOR SEQ ID NO: 852:

25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 852:

GTTCGCTCCA ATGTACGCAG TTGTATATGC ATAGACACCA AAATCGAACC ATTCCATTGC 60  
 35 ATTACCGATA CCGGTTGCAA CAACGGTTTT TTTAGCTTTC TTGTCATCCA CCATGTTAAT 120  
 ATTCTCTTTA TTAAATCCA TGAATTCATA CACTCCCTCT TGTATGTTTC ATAATTATAC 180  
 GGAGTTAATT AGTTTTGTCA AATTTATAAG AATTTAAACT TTTATATAAA TACCAAAGTA 240  
 40 TGTTTGTTCA AAAATTTTCG TTTATCGnAT TAAATTCATG GTTTTATACC TCATACATTG 300  
 ATTAGACATA ATAATCTAAA CACGACGTTA CTTTGGATAT ACTnAATGGT nnCACACTCA 360  
 GTAGGAAGCA CGCATTGCT CGATAATGTA ACCATACTCA 400

45 (2) INFORMATION FOR SEQ ID NO: 853:

50 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 361 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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GGTGAAATTG TAACTATATA ATCGATATTA CCTTCAGTGT TCAAACTGG AAAATAATAA 60  
 TTACCATCAC TCTTTTGTGTT GAATTTATAA ATTTTAAAAG GTTCACCAAG TGTATACGAG 120  
 5 GCTTTCTCTT TATTATAGAT TTTATCAAGT GAAGTAACAT AAGAAAGATA GTCTTTTGTG 180  
 GCTAAATTAC GTACGTCAGT AGGAACACTC TTGTCCTCGA CATTAACTTG CACATGCTTC 240  
 TTATCTTTTG CTTTGATATT TGAATTGCTC TCAGCGTTTG CAATAGGGGT AACACTTAAA 300  
 10 GAAATATTA AACTTAAAGC TATTAATTTT GGAAAGTTTC TTTTCATATA AAAACTCCTT 360  
 T 361

15 (2) INFORMATION FOR SEQ ID NO: 854:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 605 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 854:

25 ACnTTATACT AGAnAAAAGnT ATTAAAGTAT ATCTGCTTTA CACCATTAAA AAGCGGCAAA 60  
 TGCTATAGAT AATCTAAAGC ATCTGCCGTA TGAGnATTTA TTTATTTTGTG ATTGTCATAA 120  
 TCGTGTGGTT TTAAATTAAT TGTTTCTAGC TTTACAAATT TTGTTTGTG AATGATTTTA 180  
 30 TGAATAAGT AAATCAACGC TAGAATGATT AAAGGTAAAA AGTTTTTAAA AGCATTTAAC 240  
 CATTGATCTT TTAAATATA TTCAACTGAG CCACCAAATA GCAAGAATAA TAGTGTAGTG 300  
 ATGACAATGA TTGGTCCTAA TGGATAAAAA GGTGCTTTAT ATGGTAGGAC CTTATTAGGG 360  
 35 TCTTGACCTT GTTTTTTAAT AGCTTGTCGC AATCGTATTT GTGACCAAAT GCTTGATCCC 420  
 CAAACAATA TAATCATTGA ACCAATAATT TCAAGTAAAT TAAAAACGGC ATTTGAATTA 480  
 AAGTTTGCAT AAATAATAAC AATAACAACG ACTGCATAAG TAGTTAATAA TGCTCTTAAA 540  
 40 GGTAACCTAG TTGTCTTGTT TAATTTACTT AAAAATTGGG GTGCTTTTTT GTCTGAACTT 600  
 AAGGA 605

45 (2) INFORMATION FOR SEQ ID NO: 855:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 515 base pairs  
 (B) TYPE: nucleic acid  
 50 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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TTGAACAAGC ATTTTAAAT AGTCAACAAC ATCamGCAAT TAGTGAAGAG GCACAAC TTT 60  
 TAAATAATCC AGATGAATTA ATGGCATT TTT TAAAGAATAA GCGTAAAAAT ATTTTAGAAA 120  
 5 ATGCATACAT TATGCCGCAT AATATGAGAG AAATGTTACG AAGTTATTTG GAAAGTATGT 180  
 CTCAAGACTT TAATGTTGGC GGATTTTTTA ATAAAAAGAA GAAAAAACTA CAAATTCAAC 240  
 AACAGCGATT ATTAACAGCG ACAGATGCGT TACAAGAACA TGTTAATCAA CAAATTCGTC 300  
 10 AACCAATGCG AGAAGATATG TCATTTGTTA CGCGTTTAT CAATAAAAAA GmAGCTTCAG 360  
 aTAmAGTATT AAATCAGCAT TATGACGTTA AGCCAGAAAT GATTGAAGGT TTATATCAAC 420  
 CACAAACATC AATCAGCAAT ACTTATGTAC TTACATTTTC AGACGAAGTG GTTAAAGCCA 480  
 15 TTAAGAAATA TGTGAACAA CAATCAACAC CAATT 515

(2) INFORMATION FOR SEQ ID NO: 856:

20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1607 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 856:

30 GTCATTTTTA AAATTTTCGA TTCGCGTTTA ATTTTTTCTC TTTTTTCTTT TTCTTCTAGT 60  
 GACATACTTT CTTTAGGTGT TTCAACCAAT TCAGATGTAT CTACATCATC AATTTTAGTG 120  
 ATTTTGTCTA CATCTTTCTT TAAATCTTCT GGGACGTTCT CGAAACGCTT ATATTGCTCT 180  
 35 TTAGAGATAC TAGCAGCTAT TTCATTAGCT CCTAAAATTT CATCTATCAA GCCGAAAGAC 240  
 AAGGCTTCTT CTGCAGTAAG CCAAGTTTCT GCATCTAACA TCTGTTTTAA GTGTTCTTGA 300  
 TCTAAATCTT TTGCTTTATC TAAATAAGCT GAATTACTAA CAGCATCTGT TTTTCAAGT 360  
 40 AAATCCGCTG TCTTTCTTAA TTCTTCTGCA TTACCTACAG TCATAACCCA TGAATTATGA 420  
 ATCATTAATA AACTATTTTT GTGCATAAAA ATAGTGTCAC CACTCATAGC GATAACACTA 480  
 GCAATTGATG CCGCTAAGGC ATCGACATAG ATATTAATTT TTGCAGGATG CATTTTTAGC 540  
 45 ATATTGTATA TTGCATGTCC TTCAAATACA CTGCCTCCAG ATGAATTAT ATGAACATCT 600  
 ATTTCACTGA TGTCTCCTAG TTCATCTAGT TTATTTTGA AATCTGTAGC AGTTACATCA 660  
 CTTTCAAACC ATTTATCACT TACAATATCA CCATAAATGa ATATTTCAAC TTTACTTTTT 720  
 50 GATTTTCTTT TCATTTGAAA ATACTTAGCT TTCATTGACA TTTTATCAC CACCTTTCaA 780  
 AGATTTTCTT AATTCAAGTG GCGTGTCAAT TGGGTATAAA TCACCGCTTA ATTAGCGGCT 840

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AACCACTACG AACTGCTTTA AAGTACACTT CTGCTTGTGT TGCATATCA GCCCTTAAAT 960  
 AAGATTTAAC GTTAAATTTA AAATACCTAT TTTTCTCTCT GTCTGTTTTA GTAAGTAGTT 1020  
 5 TCCGATTAA<sub>n</sub> TTCTTCTTCA TACTGTTTGA CGATTGGCAA TAAGGTATGC TGCAAGTAAA 1080  
 ATCTGTTTAA CTCTTCATTT TTCGCGAAAT TTGTATTTGA TCTTGCATTT AAGAATATTG 1140  
 10 AGGGCAATTG AAAACGTTA GCTACTCTTT CTCTTGTTAA ATTCTCGCTT GCCACTATAT 1200  
 CTTCAGAGAC ATATTTTTTA GTAAAGGTT CGATITCAAC ACCAGGCTCT TGGAATAATA 1260  
 TTCCACCGTT TTCTTCATAG TACTGTTTGA AATCTTCTAA CACTTGTTGC CTTTTTCTG 1320  
 15 TACTTACATT GGAACCATAT TTAAGCATAA AAGAATCTGG TTTTGCATT TCTGTAAGAT 1380  
 TAAAGGTTCT TACTGCATTG TCAAAATCAG TTGTATTCTT CAACACATCA ATCGGACTAA 1440  
 TACCTTGAAC CATATTAGAT GCCACGATGT GTTTAAATG CAACATGTCC aTATTATGAA 1500  
 20 CAATCAATTT ATTTCCAGTT GCAGCATGAA TGGAATAATA AAGTTCACcG TGATTGGTTT 1560  
 TCAATTAACA TTTCAACAAC ATCTGGATTT AATAAGAAAA GCTTTGA 1607

(2) INFORMATION FOR SEQ ID NO: 857:

25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 346 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 857:

35 ATGCGCATTT AACCGCATTT AGAGATGCTG AAGATCAGTA TAAAGCTTTG TTAGAAATTA 60  
 CAACATTACC AGAAGGTAGA ATTTATGTTG CTCGCCAAGA TCAACTCATT GTGGGTTATG 120  
 TCACTTTCCA CTATCCTGAT GAAATTGAGC GCTGGTCTAC AGGTAAGCTT CCATATTTAA 180  
 40 TCGAATTGGG GGCAATTGAA GTCAGCATCA ATTTTAGGCA ATTACAACCT GCAGAAAAGC 240  
 TGATACAACT TAGCCTTCTA CACCAGAATT CGAGAATTAT ATCGGnATAA CTACAGGATA 300  
 TTACCGGCAT TGGGGGTTTA AAAAATCCCC AGTnAGAGGT ATTnCC 346

(2) INFORMATION FOR SEQ ID NO: 858:

50 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1176 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55



ATTACTATAA TGAATCTTGC GAGATATTTA GAAGTAATGA TACAAnATAA TGGACTTTAG 60  
 AATTTmAATT TACAATAAAT AGTTCTATGA TTAAATGTCA GTTTTATGAC ATTTATTTAT 120  
 5 TGAAAATACG AACGAATGaG CGATaTGATA ATATAGATAA GAATGATTTT AATTTAGGAG 180  
 GCCTTTATGG TGCATAATAA AAACAATACA ATTTTAAAAA TGATCAAAGG TGAAGAAACA 240  
 10 TCACATACAC CTGTTTGGTT TATGCGACAA GCTGGCCGTT CGCAACCAGA ATATCGAAAA 300  
 TTGAAAGAAA AATATTCACT ATTCGATATT ACACATCAGC CGGAGTTGTG CGCTTATGTA 360  
 ACACATTTAC CAGTTGATAA TTATCATACA GATGCAGCAA TTTTATACAA AGATATTATG 420  
 15 ACACCATTAAGCCAATTGG TGTCGATGTA GAAATTAAAT CGGGTATTGG TCCAGTGATT 480  
 CATAATCCAA TCAAAACAAT TCAAGATGTT GAGAACTTT CTCAAATAGA CCCCGAACGA 540  
 GATGTACCAT ATGTATTAGA TACAATTAAA CTTTTAACAG AAGAAAAGTT AAATGTGCCG 600  
 20 CTAATAGGAT TTAATGTTGGC ACCATTTACA TTAGCGTCAT ATATGATTGA aGGCGGACCA 660  
 TCGAAAAATT ACAATTTTAC AAAAGCGATG ATGTATAGAG ATGAAGCAAC ATGGTTTGCT 720  
 TTAATGAATC ATTTAGTTGA TGTATCTGTT AAATATGTAA CAGCTCAAGT CGAAGCAGGT 780  
 25 GCCGAATTGA TTCAAATTTT CGATTTCATGG GTAGGTGCAT TAAATGTCGA GGATTACAGA 840  
 CGTTACATTA AACCACATAT GATTCGATTA ATCAGTGAGG TTAAAGAAAA ACATGATGTG 900  
 CCGGTAATTT TATTCGGTGT AGGTGCCAGT CATTTAATCA ATGAATGGAA TGATTTACCG 960  
 30 ATTGATGTAT TAGGCCTAGA TTGGAGAACG TCTATTAATC AGGCTCAACA ATTAGGCGTT 1020  
 ACTAAACAT TACAAGGGAA TTTAGATCCA TCAATTTTAT TAGCACCATG GAATGTCATT 1080  
 35 GAAGAGAGAT TGAAACCAAT ATTAGATcAA GGTATGGAGA ACGGTAAACA CATCTTTAAT 1140  
 TTAGGACACG GTGTATTCCC AGAAGTGCAC CAGAGA 1176

## (2) INFORMATION FOR SEQ ID NO: 859:

40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 621 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 859:

50 ATTTGGTGCA TTGGTAaAAT TGACCTGAAA GnAAAAAGTG GTTTAGTTGC ACATTGAGTG 60  
 nAAGTGCGCA GATGAATTAT GTTGAAAACG TGAGGAAGAG CACCTTTGCT GTTGGTGATG 120  
 AAGTAGACGT AAAAGTATTA TCTATTGCTG ATGATGGAAA AATTAGTCTT TcAATTAAGA 180

55

AAAAAGCCGA AGATTTTGAA AAGAAATTAA GCAATTTCTT AAAAGATAGT GAAGATAAAT 300  
 TAACTTCAAT CAAACGTCAA ACAGAATCTA GACGCGGTGG CAAAGGTTCA AGACGTTAAT 360  
 5 TAAAATAAAT AAAGACTGTT TCGATAAGGA ATATATTTAG AATGATGCGT ATCGAATAAT 420  
 CGATTGCAGC GTTAGACAAT CTAAGACTGT TTCTTAAATA AGGAGCAGTC TCTTTTATTT 480  
 GTAATGATAT AACTAAGACT TATACCATT TTTGAAAATTG TAAAAGTGAG GTGATGTTAT 540  
 10 GCAGTTAAAT AGTAATGGTT GGCATGTTGA TGACCATATT GTTGTGCGTG TTTCTACAGG 600  
 TATTGATAGT ATGTGTTTnn T 621

15 (2) INFORMATION FOR SEQ ID NO: 860:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 544 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 860:

25 TATATTAGGT ACTTGTGTTG GTATTGTGCC AGCTTTGCTG TCTACTATAA TTTCTAAAAG 60  
 GTTTGAACAT ATAAAAGGGA AAGTGCTAGG TGTATTTAAT TTTGTGAGAT ATATTGGAAT 120  
 GACTGTGCGT GCATTATTAA TTGGTATCAT TTCTCAGCCG TTGGTAGCCT TTTACTTCAC 180  
 30 AACTATAACT ATCATGTTAA TAGTAATATT TCTTTATATA AAGATAGTTG ACTTTCAGCT 240  
 AAAGTATGCC AAATAAACTT AAAAAAGCAG TGAATCATTT CAATAGATGG AATGATTCAC 300  
 TGCTTTTTGT TTATAGAAAT TTAAATTC A TGCTTTATG CTAACAACAA TATTATTTTA 360  
 CTCTCTTACG TTTGCCAATG TAACcGTATA GCAAAGTAAA TGACTGCGAT AATGATGACA 420  
 ACATACATat ACGTGAATAG GAAGGAAGAC CAGTCATCAA CATACCAAAG CTATCGCTCA 480  
 40 AAGTGCGnCT GGTAATTAA ACCGAATTCC AnGATTGTAG GAACCCnATT AATGGAAATA 540  
 ACGG 544

45 (2) INFORMATION FOR SEQ ID NO: 861:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 651 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 861:

55

AATTTAAAAT ACATTTATGC TTTACCCATT CGAAAATACC TTAATCATTT TCATTTATAG 120  
 CATTGTTTGA TTGAAGGATA AAAAGTTGTT GTTTACAATA AAAATAATGA GTATCTGAAA 180  
 5 TGAGGGATTC AnTATGACAC ATGTGGAAGT AGTAGCGACT ATCGCGCCAC AATTATCTAT 240  
 CGAAGAAACT TTAATTCAnA AnATTAATCA TCGTATTGAT GCAATAGACG TATTAGAATT 300  
 10 ACGAATTGAT CAAATTGAAA ATGTCACAGT TGaTCAAGTG GCAGAAmTGA TTACAAAGCT 360  
 GaAGGTTATG CAAGATTCAT TCAAATTATT AGTTACGTAT CGTACAAAGT TACAAGGTGG 420  
 CTATGGGCAA TTTACAAATG ACTCGTATCT TAATTTAATA TCAGACTTAG CAAATATCAA 480  
 15 TGGCATAGAT ATGATTGATA TAGAATGGCA AGCAGATATT GACATTGAAA AACATCAACG 540  
 AATCATTACA CATTGCAAC AGTATAATAA AGAGGTGGTT ATATCACATC ATAATtTCGA 600  
 AAGTACGCCT CCATTAGATG AATTGCaATT TATATTTTTh nAAATGCAAA A 651  
 20 (2) INFORMATION FOR SEQ ID NO: 862:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 401 base pairs  
 (B) TYPE: nucleic acid  
 25 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 862:  
 30 TGTGAGTGGT AATGACACAC AAGCAGATTT AATAGGTTAT AGTTTTAAGT TTGACGGTGC 60  
 GATTTCAAGG CAAGAGGCTT CTAAAGATGT ACATGCAGTT ATATTATCGA ATAAAACACT 120  
 35 ATATTTATTA GATGTATTAC AAAAATTACC GATAGATAAA ATGAATTCAT TGAATATCCA 180  
 TCAAGAAATT ATTGATGAAA TGTCAGATAT CATTTTAATG TTATATCGTG AATATGCAGG 240  
 TATGTTTTTT AAAAGTCAGA AACTAATCAA CCAATTAAAA AGATTGGAmC AATAACaTAA 300  
 40 AATAATAAAa GGTATTCAAG TAGCCACATA GATGTGTTTA TTTGAATACC TTTTkGAATA 360  
 GaaAAGaGAT ACTGGCaATT TTAATAACCA GtATCTCTTT T 401

(2) INFORMATION FOR SEQ ID NO: 863:

45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 308 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 863:

55

ACAAAGTAAT CAATATGTAA TATAAAATAC ACTGGTACTC AATATATAAT GATGATAAAA 120  
 TTAATTTTAA TTAGATAGAG TTGCTTTGTG TTTTAAACGC nGATGCTACT ACTTATCTTA 180  
 5 ACAGTTGATT AAGTAAATCA TTTAACAGCG AGATTATnCA ACCAGGGGGA TGACTIONTAAATG 240  
 AATTTATTCA GACACCAAAA TTTAGTATCA GAAATTTAAT GTCGGTATTT TTTGAGCTTT 300  
 AATGCCAC 308  
 10

(2) INFORMATION FOR SEQ ID NO: 864:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1827 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 864:

TTCTACATCT TAAACGATGA CCTAACTATG ACGTTAATCT GGAAAGATGG GGAGTTGCTA 60  
 GTATGATGTT GAAATTTAAA GCTTGGGATA AAGATAAAAA AGTTATGAGT ATTATTGACG 120  
 25 AAATCGATTT TAATAGTGGG TACATTTTGA TTTCAACAGG TTATAAAAGT TTCAATGAAG 180  
 TAAAACTATT ACAATACACA GGATTTAAAG ATGTGCACGG TGTGGAGATT TATGAAGGGG 240  
 ATATTGTTCA AGATTGTTAT TCGAGAGAAG TAAGTTTAT CGAGTTTAAA GAAGGAGCCT 300  
 30 TTTATATAAC TTTTAGCAAT GTAAGTGAAT TACTAAGTGA AAATGACGAT ATTATTGAAA 360  
 TTGTTGGAAA TATTTTGA AATGAGATGC TATTGGAGGT TATGAGATGA CGTTCACCTT 420  
 ATCAGATGAA CAATATAAAA ATCTTTGTAC TAACTCTAAC AAGTTATTAG ATAAACTTCA 480  
 35 CAAAGCATTAA AAAGATCGTG AACAGTACAA GAAGCAACGA GATGAGCTTA TTGGGGATAT 540  
 AGCGAAGTTA CGAGATTGTA ACAAAGAACT GGAGAAGAAA GCAAGCGCAT GGGATAGGTA 600  
 40 TTGCAAGAGC GTTGAAAAAG ATTTAATAAA CGAATTCGGT AACGATGATG AAAGAGTTAA 660  
 ATTCGGAATG GAATTAAACA ATAAAATTTT TATGGAGGAT GACACAAATG AATAATCGCG 720  
 AAAAAATCGA ACAGTCCGTT ATTAGTGCTA GTGCGTATAA CGGTAATGAC ACAGAGGGGT 780  
 45 TGCTAAAAGA GATTGAGGAC GTGTATAAGA AAGCGCAAGC GTTTGATGAA ATACTTGAGG 840  
 GAATGACAAA TGCTATTCAA CATTCAGTTA AAGAAGGTAT TGAAGTTGAT GAAGCAGTAG 900  
 GGATTATGGC AGGTCAAGTT GTCTATAAAT ATGAGGAGGA ATAGGAAAAT GACTAACACA 960  
 50 TTACAAGTAA AACTATTATC aAAAAATGCT AGAATGCCCG AACGAAATCA TAAGACGGAT 1020  
 GCAGGTTATG ACATATTCTC AGCTGAAACT GTCGTACTCG AACCACAAGA AAAAGCAGTG 1080

55

AGTGGTGTA GTAGTAAAAC GTATTTAGTG ATTGAAACAG GCAAGATAGA CGCGGGATAT 1200  
 CATGGCAATT TAGGGATTAA TATCAAGAAT GATGAAGAAC GTGATGGAAT ACCCTTTTAA 1260  
 5 TATGATGATA TAGACGCTGA ATTAGAAGAT GGATTAATAA GCATTTTAGA TATAAAAAGGT 1320  
 AACTATGTAC AAGATGGAAG AGGCATAAGA AGAGTTTACC AAATCAACAA AGGCGATAAA 1380  
 10 CTAGCTCAAT TGGTTATCGT GCCTATATGG ACACCGGAAC TAAAGCAAGT GGAGGAATTC 1440  
 GAAAGTGTTT CAGAACGTGG AGCAAAAGGC TTCGGAAGTA GCGGAGTGTA AAGACATCTT 1500  
 AGATCGAGTT AAGGAGGTTT TGGGGAAGTG ACGCAATACT TAGTCACAAC ATTCAAAGAT 1560  
 15 TCAACAGGAC GACCACATGA ACATATTACT GTGGCTAGAG ATAATCAGAC GTTTACAGTT 1620  
 ATTGAGGCAG AGAGTAAAGA AGAAGCTGAG CGCAAATACG AGGCACAAGT TAAGATAAGG 1680  
 AGAGATGGAG ATGCCAAAGA AAACGGTAAC GATTGATGTA GATGAAAAC TATTAGTAGT 1740  
 20 AGCTAGTAAT GAAATATCAG AACTATTATA TGAATATGAC AGTGAGTAA TGTCAGCTGG 1800  
 ATGGAAGATG GCGATAATAG GGATATC 1827

## (2) INFORMATION FOR SEQ ID NO: 865:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1379 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 865:

35 TCAATTGCAT CATCATATGA AATTCTAGGG AATGGTGTG CAACTTTTTC AAGTTTTGAT 60  
 GTATCAGCT CTAAAATTTT CAACTCTAGT TTACAATTTT CTAAAACCTGA TTTTACAACA 120  
 TGTGTTACAT ATTGTTCTTG AATTTCTAAA CTTTCAGCAT GATTTGTGAA AGCCATTCTT 180  
 40 CCTTCAATCA TCCAGAACTC GATCAAGTGT CTACGTGTTT YTGATTTTTC AGCTCTGAAA 240  
 GTTGGACCAA ATGAAAATAC TTTTCCGTGT GCCATTGCTG CAGCTTCTAA GTATAACTGA 300  
 CCACTTTGAG ATAAAAACGC ATCTTGATCA AAGTATTTAG TATGGAATAA TTCACTTGTA 360  
 45 CCTTCTGGCG CACTTGCTGT CAAAATTGGT GGATCAACCT TTGTAAATCC ATCTTTGTTG 420  
 AAAAATTCAT ACGTTGCACG AATAACTTCA TTTCTAATTT TCATTACAGC ATGTTGTTTT 480  
 50 TTAGAACGTA ACCATAAATG ACGGTGATCC ATTAAGAATT CTGTACCATG ATTTTTAGGT 540  
 GTAATCGGAT AGTCATGCGC TTCTGAAATA ACTTCAATTG ATTTCACTTG CATTTCTGAT 600  
 CCTAAGTCAG AACGATTATC TTCTGTAATT GTGCCTGTAA CGTATAGAGA TGATTCTTGA 660

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TGCATAAAGC CTGTTCCATC ACGTAATTGT AAAAAGGCGA TTTTACCACT TGAAcGTTTA 780  
 TTTGTTAAAC AAGCACCAAT TGTAACGTCT TGGTTTAAAT GATCTTTCGC TTGTTTAATC 840  
 5 GTTGTTTTCA TAACCATTCT CCTATTTATT TTTTCGkTAT ACAATACTCA TTCATTTTAA 900  
 CAAAATCCGC TTTCAAGTTC TAGAACTAGA CTAAAAGATA ACGtGTAAAT GGTAATGATT 960  
 TACGCACAGA TTTGAACATT AATTTATATT AAGACAATAC AATCATCAGT TTCAGACAAA 1020  
 10 ATATATAATA AAGCCTCAAT ATTATTAGTA TGAAGGTCGT TTTTGTnCT AACATTCAAG 1080  
 TTTAATTATA AAACCTCAAAT TTTGACGACC AAACAAAAAT TCTTGTAACA GAACATAGCA 1140  
 CATGTCATGT CACAAGAATT TTAACCTTGT TTTCACTTTT TCTTTTTTTG AATTTGTCTT 1200  
 15 AATAATTTTC CAAACTGTTG AATGTCGCCT TTTTCTGAC GATAATTTTC AAGTGTGTTGT 1260  
 TCAAAAAAGT TTTTATAATT ACTGTTTATG AGTCGATCAT CAAATGAAAC TATTATGCCG 1320  
 20 CGATCATTTT CATTTCTAAT TAATCTTCCA AGTCCTTnGT CTAnAACGTG TAACTGCAT 1379

(2) INFORMATION FOR SEQ ID NO: 866:

(i) SEQUENCE CHARACTERISTICS:  
 25 (A) LENGTH: 450 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 866:

TTACAACGAA TAGTTCACCG TTCGAGTCTA ATCTATGTAA TGCTTGCTCG AATATACGAT 60  
 35 GCACGGTTTC TTTCCCTGCT CTTATTGGTG GATTGGTTAA AATAAAATCA AAACTTTTGT 120  
 CTCCACAGC AGACAAAGCA TCACTTTCCT TTACGATCAC ATTATCAATA CCATTTAATT 180  
 TTTTGTTTTT TTCAACTAAG GCTAGCGCTC TGTGATTAAc ATCTAGCATT GTAATTGAAT 240  
 40 GATGTGGTGA TACTTTAGCA ATCATCAAAC CAATTGGTCC GTAACCACAA CCAACATCGG 300  
 CAATTCGCTT ACTTGGACCA GGTGGATGCG CTTTAAAAA AGTTTGAACA AGAACATCTG 360  
 aACCATAATC TACTTTAtCt TTCGAAAACA CTCctTATCA GTTATTAAAT CAATTTTATG 420  
 45 AnGGTTnTAA TTGGATATTG AGTACGTTGT 450

(2) INFORMATION FOR SEQ ID NO: 867:

(i) SEQUENCE CHARACTERISTICS:  
 50 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 867:

5 AATGTTAACA ATATAGCACC AATTAACCCC GACATGATAA TAACGTGTAA TGTTTTATTT 60  
 CCTATTAATT GTCTCGCAAT ATGAGGTGCA ATTAATCCTA AAAAGCTAAT ACCACCGACA 120  
 ACTGAAATTG CGGATCCTGC TAATATTACT GCTAAAATTA ACAATAGCAT TTTAATAGTT 180  
 10 TTAACTTTTA AACCGAGTGC GGTGCAACA GCATCACCTA GATTCAATAC ATCTAATTGA 240  
 TAACTCCATA AAATGATGAT GGATCGTTAT TAAAACCAGG GAATATAGAT AATATCCGCA 300  
 TATCAGGCCA TATAGCTACC TGTCCACCAAC AGGTTTnTGC TCCAnGGTTC TnTAATAAGA 360  
 15 CGCACACGCG ACAATGCGCT TGCTACCATT AGGCAGCTTG 400

## (2) INFORMATION FOR SEQ ID NO: 868:

## (i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 1132 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 868:

25 AATCCnTnAA GTGCCATAAC ATCATCTCCT AACATCTTTA TTATACATCA ACATTTTATA 60  
 30 AAAATAACnT CTTATGATAA AAATGAAAAT ACTAATTTTA ATGAGAGCGT CTTAAGCCGC 120  
 AATTGATAAA ACATATGCTA CAATATTTTT AAACACTATA CAGGAGGTAC TCTATGACAA 180  
 AATATACATT TAAACCTAAA GATTTCAAAG CGTTCAACGT AGAAGGCTTA GACGCACGAA 240  
 35 TGGAAGCTTT AAACGAATAC ATACGACCAC AACTCCGTGA ATTAGGAGAA TATTTTAGTG 300  
 ACTTCTTTAC AAGTCAAAC TGTGAAACAT TTTATCCTCA CGTAGCAAAG CATGCTAGAA 360  
 GAAGTGTGAA TCCTCCTAAA GATACATGGG TTGCTTTTGC AACAAACAAA AGAGGCTATA 420  
 40 AAATGTTACC TCATTTCCAA ATTGGTATGT TTGAAGATCA ACTGTTTGTT ATGTTTGGAA 480  
 TCATGCATGA AGCAAAAGAT AAAGCAACaC GTGCAAAAGT TTTTGAAAGA AAATTTAAAG 540  
 CTATTCAACA ATTACCTGAT GATTATCGTG TTTGCTTAGA TCATATGAAA CCTGATAAAC 600  
 CATTATATTA AGATTTAACG GATGATGATT TAATAGAAGC GATACAAAGA GCCATCAATG 660  
 TGAAAAAGG TGAATTCTTT ATAGCGCGTG CAATCACACC ACAAGATAAA AGATTAAAAA 720  
 50 GTGACAAAGC ATTTATTGCA TTTTATAAG AAACCTTCGA TCAGTTCTTA CCATTTTATT 780  
 CTGCATAAAT AACTTTGTTT AAATAATAGA GCACTTAATC ACATCCaTGA TTTCGTGctC 840  
 55 TTtTTTCTTA ATATTAAATC GAACGTtCAA CATAaTAATT CATACTTTTA AAAAAATTAA 900

GGTGAGTCAA AATGAATAAT AAACGACATT CAACAAATGA ACAATTAAGT TTAGACGAAA 1020  
TAAACAATAC AATTAAATTC GATCATCGCA GTTCAAATAA ACAGAAATTT TTATCATTTT 1080  
5 TTGGACCTGG GTTATTAGTC GCTGTTGGTT ACATGGATCC CGGAAACTGG AT 1132

(2) INFORMATION FOR SEQ ID NO: 869:

(i) SEQUENCE CHARACTERISTICS:  
10 (A) LENGTH: 418 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 869:

CTCAATGTAT TGA CTGTGAT TTGGAGTGTA TAATGCTACT GTTTTGTCTA TAGCCATCGC 60  
20 ATCAAATATT ATATTTGAGT AATCAGTGAT AACGACATCA GACATTAGAA TTAAGTCTTG 120  
AGCACTAAGA TACTTTGGTG CAACAAGCGC CTCTTCTGGT AAGATCGCTT CATCAACACC 180  
CTGAACCACA ACATGATAGG CTTTGAATAA AGCATCTGAT AGTGGAATT GTTGCGCACT 240  
25 CACTAATCCA ATAGGTGCGT ATAATAAAAC TGGTTTTTGA TCATTTATTT TAAACGATTT 300  
CTTATACTGT TGTGAGTAG TACTTTCGTT ACTCTTTTGT AGTAAATATT GGTGTTTAGG 360  
ATTACCATAA GCCAATACAT TGCTTGGTGA CTAGAAAAG nCGTTTGATA AAAGGGCT 418  
30

(2) INFORMATION FOR SEQ ID NO: 870:

(i) SEQUENCE CHARACTERISTICS:  
35 (A) LENGTH: 587 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 870:

GAGTnTGTTA CAGTAATTGA TTTTATTGGT AATTnTAAGA CAAATTATTT AATTCCGATT 60  
GCGCTTTCTG GGGATCAATC GCAAnATAAA GATAATTATA AGAAGTTTTT AACGAATAAC 120  
45 GATTCGATTA ATGGAGTATC TACAATTAAT TTTGAAGAAG TTGCTAAAAA ACAGATTTAC 180  
AATTCATTGG ATGCAGTATC ATTAAATCAA AATAAATTAA TATTTAAAGC TTATGAAGAA 240  
50 GTTGAAAATA GATTGGGACA CATGCCGTTA CTAATGGATT TCATACAACA ACATTCTATA 300  
GATCCAAGCG TTATATTTTC TAAATTTAGT AATTATTACG AGTTCTTAGT GAGATATAAA 360  
AAAATAGATA CATTATTGAC GGAAAATGAA TCTAAAAATC TGTTTTTCTT TTCAAGGCAA 420

55



TTAACATATG ATGAATTAAA AAATAAAATG TTGAACGAAG TTAAGGATAT AACAGAAGAT 540  
 GATATAGATA CTTCAATTAAG AATTTTAGAT TTTTCATTTT ACAACGC 587

5

(2) INFORMATION FOR SEQ ID NO: 871:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 971 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 871:

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CTACTAAACC AGGTAATCGG TAGAATCCAA GCAGGAATAA ATAAATTAAT GCnACACCAA 60  
 TAAACGATGC AAACACAGTn TTATCTAATG CATCTTGACC AAATTGGGCA CCTACTGAGT 120  
 TTGAATAAAT TTCTTTCAAG TCAACTGGTA AAGAACCTGC ATTAAACAAT kCGGCGATTT 180  
 GTTTTGCTTT TTTAACGCCT TCTTGTCCTT TAAATCCACC CGAGATTTCT ACGCTATCAG 240  
 AATTGATTGG TTGATCAACA CTTGCTGCAG AAATAAATTT AGGGTTTTTC TTTTGTGCTT 300  
 CTTTTTTATA GCTGTCACCT TTTTGTAAAT CTAACCAAAC AACCATGACA TTATCACGTT 360  
 TCTTAGAGAT TTCTTCCGTT ACTTTTTTAA ATTTGTTTTT GTCTTTTACT TTAAAAGTAA 420  
 CTGTAGGcTG GTTTGTTTCC tGtTTAAAT CTTGtTTGGC AGATCCCTGT TTaATATCAG 480  
 AACCgCTTAA TTTtACTTTA TCTTCTGCAT CGCGAATTGT TAAATTAGCT TGAGAAGATA 540  
 AAATTTTACG TGCTTCATTC TGGTCTGTTA CACCAGCAAG TTGTACTCTA ATTCTATTAG 600  
 GTTCTTCAAC TTGAATTTTA GGTTCGAAA CACCTAAAAC GTTAACACGA TTTTCTAATG 660  
 TTTGCGCTGT TGATTGTAAG GCTTTTTTAT CTATTTTGTC GCCTTTATTT AAAGGATCGA 720  
 CTTGATAAAG CACCTCAAAT CCACCTTGCA AATCAAGTCC TAAATTGmCA TTCTTTATAA 780  
 CACTTTTATA AGTTGcAGCC ATTCCGGCAA ACAACAATAC GACTAAAAGC AAGAACGCAA 840  
 TTATTCTACT ACTTTTCTTC ACATGAACAC CTCATTATTT ACGTATGTAT TTAGAATACT 900  
 TGAATACTAT TTTATAACGC AAGTGAAATC TTTCTTACAA AATTTATTAG CCTTATACAT 960  
 ATTAACATAC T 971

45

(2) INFORMATION FOR SEQ ID NO: 872:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 636 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 872:

CTGGTTAAACA ACATCTGGTT CGGCATCTCC TTAGCTTCCA CTAAATCTTG GATGTCTTGG 60  
 5 nnATCTTGCG CAAGTnGTGC TTTGGCTTGT TCAATTtCTy CTTTAGTCAT CGCATTGTTA 120  
 ATGCCGTTAT GACCTTGTTG AAGTATTTGA TTAATACGAT CTTTAAGTGC TTGTTTTTCC 180  
 10 TTATCTGTTA GATTTGGATT TCGATCAATT TCGTCAATTA ATGCTTGaAC TTGcTTATCA 240  
 ACGTCTTTAT TGGCATCAAT TTTTGCTTTT GGTATTTTCAT TGGCATGCAC TTGTTCAATC 300  
 GCGTGGTTGC CTGCTGTTTG AACTTGAGAT ACAGCCTGAT TACTTGTTGC TTTATTAATG 360  
 15 TTGTTGATGA TGCTGTTTGC CAATTCTTCT GCTTTATTTT TCGCAATAAG CTTGTCTTGA 420  
 TCCGTCGCAT TTGAAGCTTC GATTTCTTTT AGCTTATTAG CTAAAGCTTG ATTAATAGAT 480  
 TGAATTGCCT TGTCTTTAGC ATCTTGTAGT CGTTGATCAC CATTAAAGATT ATGGATTGCA 540  
 20 TCATTGACTg CTTGGATTGC GCCATTGATA TCATTACAT tTGTGTaTCA CTATTTAGCA 600  
 ATGTATTTGC TAGACGTTgG CATCATCGAA GTTTGT 636

## (2) INFORMATION FOR SEQ ID NO: 873:

25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 659 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 873:

35 CTCTGAATGC ATTCATTAAA CGCTGGGTCT CTTTATATGA AACGTATTTG TCATTTTtag 60  
 AACTCAATCC GTAAAAATTG TCAACTTTCT TTTAATATT ATCGTAATCA ATGGTTACAT 120  
 TACTTAAATC AATATCTAAA TCTATATTTT CTGCATCTTC TTAAAGCCC GCTATACTGA 180  
 40 AAAAGCCTTC AATCGGCTGA TCAATCATTT CAATATATTT TAAAGCTGTG ATTGAACCTA 240  
 AACCATGTGT TACAAAATAT GTATCCTTTT TCGGTACATT AATTTGTTTC GTCATAGCTT 300  
 CAATCCACTG ATCCACTGTC TTCGCTtCAG GGGATTCAAA ATTAAATAAT GTTACGTCAT 360  
 45 ATCCTTCTAA AGTTAAGTTA TGCTCCAACC ACTGATACCA ATGATTTCTA CTATTTCCAT 420  
 GCATAGAATG TACAATAtTA CATCTGTCAT CTCATTCTCT CCTTTCAACT TACTACTTCT 480  
 TTTCTATTTT TAAAAAATG ACTGATTACC TATAATTGTA AAATAAAAAC ACCTTAATTA 540  
 50 GAAATGTTAT ATCGCAAAGT GACATTTCTA ATTAAAGTGT ATTGTCATCA TTTCAATATC 600  
 ATTCAAAAAC AGCTAAACCT TTGTCTCTGC TTCAATTtCA CAAAAATAAT TCCCGCTGA 659

55

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 315 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 874:

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AAAATAAAAT CCATTTTAGT ATTCGTAGAA AATGAGAGCC CCCTTTACCA CAATATGTAA      60
ATGTATATTG TGAAAAGGGG GCTTTTATTT ATGACATAGT TGTTCAACTC ATACATTCAG      120
TTGATAATGC AGTGCCTTAT GCAGCTATCC ACTTCATATG TATGGCGCAT ACTTGATATA      180
TGAATATCAT CAAGATTTTA AAAGTATCGC TAATTTTAAA GTCTTAAAAC GCAGATTAAT      240
GGTCATGATG TGTTAnTGCG TTTTGGTTTT TAGAGCCACG TAATTCCCAAn GGACATATAG      300
GAGGAACCAT TCCAC                                                    315

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(2) INFORMATION FOR SEQ ID NO: 875:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 482 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 875:

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TACACGACCT TGTAAGTCAG CTGCTTTATA AGCTAGGGCG ATGTTATCAA AGTTGGATGT      60
ACTTTGAGCT TGGCATTTCG TTAATACTTT TAACGAAGGA TTAAATATAT GTCTGATACG      120
TATATATTGA TTATATTCAA TTCTTaATTt GGATAAGATT GCTGATAATT TGAAGCAATC      180
GGAGCTAAAT GGATCGAAAA ATGAATAAAT TTCGATTTTA CTTACAGGTG ATAGaTTGAT      240
ATCTTCACGA CTCTTATTTT CCATTaWTCG TAATTCTCCA GCCATGTTTA TTCACCTACA      300
ATTAATTTTA GGAATTCACC ATATGaTTAG CAGTTAATCT TaAGCGCTCA AATAAATAAT      360
CTCCAACACC TTGTGGAAC caGCgCGaTT AATTGCTGTC TGCATATTTT CTAGCCATGC      420
ATCTCTTTCA AATTCAGTGA TTGTAAAATC TATATGTCTT TTTCTTAGCA TAGGATGTCC      480
GT                                                                    482

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(2) INFORMATION FOR SEQ ID NO: 876:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 670 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 876:

5 ATGCAATTGA ATTCTTAAAA GCAGAAGGCT TTGATGATAT TGAATGGGGC GAAGATTTTG 60  
 GTGCGCCACA TGAAACAGCC ATTGCTAATC ATTATGATTT ACCGGTGTTT ATTACTAATT 120  
 10 ATCCAATAA AATTAAGCCT TTCTATATGC AACCAAATCC TGAAAATGAA GAACTGTAT 180  
 TATGTGCAGA CTTAATTGCA CCTGAAGGAT ACGGTGAAAT TATTGGTGGA TCTGAACGTG 240  
 TGGATGACTT AGAATTGTTA GAACAACGCG TTAAAGAACA TGGATTAGAC GAAGAAGCAT 300  
 15 ATAGTTACTA CTTAGACTTA CGTCGTTATG GTAGTGTGCC AACTGTGGA TTTGGTTTAG 360  
 GTTTAGAGCG TACAGTAGCA TGGATTTCTG GTGTTGAACA CGTTCGTGAA ACAGCGCCAT 420  
 TCCCAAGATT ATTAACCGT TTATATCCAT AAGTTTATAG GTCGTTACTT AAAATATATA 480  
 20 TTATGATAAT AAAAGAATC GTCCAGCCTA TATTAATAGC TGGGCGATTT ATTCTTGGAA 540  
 AATGAAGATT GATAACGGCT TATATTAATC ATGAACAAAC TTTTGTTTAG TAACTATATT 600  
 TGGAAAATAA ATAGTTCATC TGATTATCCA TAAAGTTCAT TGTTAAAATC TAGTGTTAAA 660  
 25 AAATACTGTT 670

## (2) INFORMATION FOR SEQ ID NO: 877:

30 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1258 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 877:

TGCAAAGTAA ACTGGATGGC TnTCTTGCCG CCAAGGATCT GATGGCGCAG GGGATCAAGA 60  
 40 TCTGATCAAG AGACAGATCC TAACCTCTCA TTTCCGATAA GTTTAGTATG TATTATAGGT 120  
 GATGATTnTC TTGTTTTCAA CCTTATACAC AATATTTTGG AnATTTATAT TATATTCATA 180  
 TAAGGAAGGC GATTAATTAC GATTCATCAT TATATCTCTA CGTGTTAATT TATTAACcTA 240  
 45 TACTATATTT ATCaAcACAA CAGTTTTTCC TTTCATTTTC AAACATAACA GAAAAAGCCT 300  
 GAGACATACT TAGTCCCAGA CTGTTCTATA ATTAATTAAG GATATAACAA GGTTAATCAT 360  
 50 TCAAAGCTAA CATCACATTT ATTCACGTGA ATTTTTCATA AAGAATAATA ATGACTGTAA 420  
 TTCTATACCT AAGTCAATTT GATGTACTTG CACATCTGAA GCGGTATTAA TTCTACCAGG 480  
 AGTGAAGTTT AAAATACCTT TCACACCAGC TTGACGAGT TCATCTGCAA CTTTCTGTGC 540

55

TAATTCATCG TTATCTTTAA CAATAACGTT CCCTATTTTC TGGCCAATAA CATCTTCTTT 660  
 TACGTCAAAC GCTTCTGTAA TCGTCATATC GTCATGTATT GAAAAGTTAT ATGTGAGCAA 720  
 5 AGCTTTCCTT AGGTTCCCAA CTCCGACAAT TGCGATTTTG ATCATGTCAC TCTCGCTTAG 780  
 TTCAGATTTA AAGAAATCCA ATAAACTATC TATATTATAT CCGTaCCCTT TTTtACCTAA 840  
 TTCGCCAAAA TATGAAAAGT CACGACGAAT TGTtGCCGAG TCAATTTGTa ACGCATCGCT 900  
 10 AATCGCTTTT GAATTTACAC GATCTATACC TTTAGATTTT AATGAACTGA CAAATCTATA 960  
 ATATAACGGC AAACGTTTTA AAGTTGCTCG AGGAATTTTA ACTTGCTCAC TCATTGCTA 1020  
 15 TTTCTCCTT CGTGTGTGAA TGAATTATAT CTATGTATTC AAACGAGTTA GAGCGTAATT 1080  
 GTTAGATTAT TAAAAACAA ATAATTGaTT ACAATGAATA CCTAAATATT ATACATTaWT 1140  
 GAATTTTAAA AATAAATATC TTAGTTTCAA GACGGCGTTT TATACTGTAA AATGGTTATT 1200  
 20 AATGTAATAA TTACGCTTGT TTCATAAGTT AATAAAATTT GAGAAGACGA AGGTGAAG 1258

(2) INFORMATION FOR SEQ ID NO: 878:

(i) SEQUENCE CHARACTERISTICS:  
 25 (A) LENGTH: 546 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 878:

AAACAATCCC CnCCAAAGTA ATTCCACCAC TAATTGTAAA TAACTTTGGA AAGGATGTTG 60  
 35 TTTGTnATTC CCATGGACAC ATGCCATCTn ATTAAAGTTT TATACTCTAT TTTTCTGATG 120  
 TCTTGATTAA TTGCAAGCGG TCTTGCGAGC CTTGTTCAAG CTCATATTCT TTATCTACTT 180  
 GCTTACCGTT TTCryTTATT AATCTTACGG TTGCGGTAAT CTTATCACCA TGTTTTTCAG 240  
 40 CATCTATAAT TTGTGGTGAA CTAATCATCA TTAAACTTCC TTTAGATACA CGCTTCTTTA 300  
 CATCATCATA AAAAGATGAT CCTTTTTTTA TATATGATGA TACAAAATCA AAATCCGACT 360  
 GATTAAACGC AGCATTATTC GCTAAAGAAT ATCCAGCAAA GAATTCTATC AATTTGTTCT 420  
 45 TCAAGCTGTT TTCTTCTTTT TCTTTCTTTT CAACATAGTC TTCGATATCT TCACTGTCAA 480  
 AATTCAAAGT TATCTCTGTA TTGTATTTTA AATCGCTAAG CTTTAATCGT CTTGCTCTGT 540  
 50 GATGTA 546

(2) INFORMATION FOR SEQ ID NO: 879:

(i) SEQUENCE CHARACTERISTICS:  
 55 (A) LENGTH: 870 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 879:

TTTATGAATT TTTTATGTAA CATTAAATAT TCTTCTGGCA ATCTTCctAC TATkTCTkTT 60  
 10 ATATATCCTT CTTCTCCTTC TTTAAATACT AAACCTGTGG GAGTTAGTGT GTTATACCTA 120  
 ATTTCTATCT CATTCAAATG ATCATTCAAA AGGTCAAAAA ATTCTCTATT AAAATAACCC 180  
 CATTTCccCAT TTTGTAATAA ATATTTCTTT CCATCTTCCA TTTCAACTTC TGCATGTAGT 240  
 15 ATCGTTTTTA GTaGCATATT ATTGAATGC CCCAAATTAT CkATCACKTc AATTCTGACA 300  
 TCATTATAG AATTAACGTC ATATTTTAAAT AAGTAATCTC CTATTTcAGT GATGTAATCA 360  
 ACTTCAGGAT CAGTCGCATC AAATGTCTCT AATGTATTAT TTTTAAAAGA ATTTATATAT 420  
 20 ATATTGACGT CGAGCATATC ATCTAACAAG AGTATCATAT TACTTAGTTC TAAAAATCCTT 480  
 GATATATCTA TAGATATATT TTCTGTAGTT GAAGAATTCG ATAGTTTTTT TAGCAATAAA 540  
 GTATCTAATA CTTCTATTTT ATTCAAGTCT TTTAAAGTTA CTATTCTAGG AAATTCACTA 600  
 25 ATTTTTTGAG GAAGATTAAT AATAGCGTTT ATTTCTTTGA TTATCACACT AATTTTATCT 660  
 ATGaATTGCT GcTTTCTATT CGGtACACGC AATGaAATAC TTGTACCACA AGTCCATTGt 720  
 30 TTTTCcAAA ATTTGAGGaT TCTGTGGaTG tCCTTGGaCT GGaTATATAA GATTCTGAAG 780  
 GTCTAACGTA ATCTACACTA TTCCTTCTAT AATTAACAAT CTCTTTAAGC CTGTTTGTGTT 840  
 GAAAAAAATT AACATTTTTA nTAACTAnGG 870

35 (2) INFORMATION FOR SEQ ID NO: 880:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 40 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 880:

GGTTTACATC TTTATCAACT GTAATTTTCAT TGACATCTTC ATTCATATTT AAAACACCAT 60  
 TAAATGTCCC TGAATATTCA CTTGTTTGTG TAACTGTGGC AGTGAATTGT CGTTACCATA 120  
 50 TGTCA TCATA TATTGTGCAA ATGTTAAAGT CCCATTGAG TTGACCGACA AAGTTGAATT 180  
 TATCGAATTG TATTcAGATT GTAAACTTAG CAGACATTTT TAACCACGAG CATTCTTATC 240  
 CAAATAGnCC TTGTCTGTTA TTTTCAAGTC AATTTTCACA ATAGGATCAC TGCATCTTTT 300

55

ACCCTCTTTT TCTGCTnCTC ACATAACTTT CAGATGGACT

400

(2) INFORMATION FOR SEQ ID NO: 881:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 333 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 881:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| AAGATATTGC | GAAAAGAAGT | GACAGTAACA | GAGGAATTTC | AAAATTTATT | CAACCATATA | 60  |
| TTGAAAATTG | ATGAAATGGT | GCATGCAAAT | GAAGCGCGTA | TTGCGTATGA | AGCAGACATG | 120 |
| CGAAAACCTT | TATATAGTAA | ACGCATTTAT | CAAAATTTAA | CATTAGACTC | TATTGTTTTT | 180 |
| AGAAATACAT | TGAGATATAC | AGCGATTATG | ATGATAGCGG | ATATTTATTG | CGTTAATGTT | 240 |
| TGATTTTGAA | AAAGCATCCT | GGATCCCGTT | ATCTGCACAT | CCAnTATTCC | TAGGGCCATC | 300 |
| AnCCTATACC | ATGCCATCCG | AGAGAGGTAT | GGr        |            |            | 333 |

(2) INFORMATION FOR SEQ ID NO: 882:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 617 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 882:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| ATTGAAAGAA | AAACTGACGT | ACTTATCCGA | TGATAAAATG | AAAGAAGTAG | ATAATGCACT | 60  |
| AATGATTAGT | TTAGGGCTGA | ATGCAGTAGC | TCACCAGAAA | AATTAGGCGT | CTATTATATG | 120 |
| TATTTTTCAG | AGATAAATAA | AATATTGATA | TAAAAGACAA | TAACTTTATA | ATAATTATAA | 180 |
| CTATTCTTAA | ATTCTGTACG | AAGAATTTTC | TTATAAACAA | AGATTTTAGC | AAATACCAGT | 240 |
| TATGATATTC | ATATTTTTTA | TTATAAAAGG | ATGTCTTAAG | TTTTTTAGGC | TTTAGGTATT | 300 |
| CCATCCTAAA | GTTTTTTTAG | CTTAAAAGTA | TCATCTACAG | CAAAATTGCA | AACGACAAAA | 360 |
| TTGATAAGTG | CAATTAAATA | AATGTTAGTA | AGTGAATCAT | AATTATCCTT | GCTTAAGCAT | 420 |
| TTGCTTTGTA | AGGGAAGTGA | GGAGGCAACT | AATCGTGGAA | GAATTTAAGC | AACATTATAA | 480 |
| GGGTTTAATT | GATGAAAGTT | TAACGTGCCA | AGATAAAGTA | GAATTGATAA | AAAAGTGTGA | 540 |
| GAAATACACT | GACGAAGTGA | TTCGTAAGGA | CGTCTTGCCT | GAAGACATTG | TCGATATTCA | 600 |

## (2) INFORMATION FOR SEQ ID NO: 883:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 583 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 883:

```

GTTGTATTAA AATTTTTCAA TTAAACAACG AAACAATACG AAGAAAAACA TATTACTGAG      60
CCACTGGAAT TGACGAGCTT ATTAGGTAnT ATTTCTCGTC TAGACAATGG TCATTTTGCA      120
CATTTCATG CTACTTTTCGG TACTCAATCA TATGAAACTT TTAGCGGACA TCTCGCTAAA      180
GCAATTGTTT CTGCAACTGC TGAAATCATT CTTACTGTAA CTGATTGGA CATTCAACGT      240
TCATTCAAAG ATGCAGTCGG TTTAAATTTA CTTGATCCTC AATAGCACTT TACTTTTTAG      300
TTGAATCAAA TTTTATTACA AGTTATCATA AGTGCTTAAT CATAAATGCA TTCTCGTTTA      360
TTAATATACT TCAACGAGTT AAATTAAATT TTTAATTAGG AATTGAATGC GTTTATAACT      420
ATCACATTTG aATGaATAAC TTTTTCATTA GAAAGTAGTG TkTATTATTG aTGCAATCTC      480
GaTACATCGC TAGAATTAC TTTtaATTTT ATTTATCGTC TCCCTTnTTG AGACTAAAAT      540
TTTTCAATTT ATGACTTTAA ATTTGTTTTT AGCATATATA CCT                          583

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## (2) INFORMATION FOR SEQ ID NO: 884:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 524 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 884:

```

GCAGAGGGCT TACGATAAAA AGAAAAATCT CGCTCGCCCG CTTCAGTCAA ACTCAGAAAA      60
GcTAACGCAt GwyTGCTyCA TTCGTGCGAT ACACTTTGA TACATCTACA CCAATACTTG      120
ATATCGTTTC AATAATGCTA TCTCCAAATG CATCATTACC TAATTGTGTA ATCATAtACG      180
CTTGTTGTCC tAACTTTTGA ACTGTACAAG CTACATTGCA TGGCGCGCCA CCAATTGCT      240
TCGTAAATGT TTGAACATCT TTTAAATTCG CATTGTAAAC ATTTGGAATA AAATCAATTA      300
ACGCTTCTCC TATTGAAAAAT AGACGTCTCA TTTATGTTCA TCCTTTAAAT CATATTTAGT      360
AAATTGTAAA TATACTTGCC CTGATTCTGT TGATGTTTTA ATACCTAGTG CGTCTTCTGT      420

```



TGTATCAACA AAAATTGTA ATTGCTTTAA TGGCGTGTCT AATA

524

(2) INFORMATION FOR SEQ ID NO: 885:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 885:

|            |            |             |            |            |            |     |
|------------|------------|-------------|------------|------------|------------|-----|
| TTAATGATTT | CTTCGTATGA | TTCACCAACA  | ATTTGCGCTA | AAATATCATG | CGCAAGTACT | 60  |
| TCACCTTCAA | CCATAAATTC | TATTTGCTCT  | ACTAAAAATT | TTACGTCATT | CATGCTATTC | 120 |
| ATTTTTGGAA | TTAACAAAGC | ATATAAGTTT  | GTAATTCTT  | TTAAATACGC | AGCATCAGCT | 180 |
| TTTAAGTAAT | GGCGTAATGC | GTCACCTCCTA | TATCTCCGGA | TAACATCTTC | TGAATAAAGT | 240 |
| CATCCTCATA | AATATCATAA | TGATGGCTTG  | CAGCTGGGTA | CAATTTTGTG | AAATTCCATG | 300 |
| TAAAAATCCT | CCCTAAATAA | AAAACACTTT  | CCAACATGAA | GAGTTGAGGC | ATGTGCAAAC | 360 |
| TAGCCCATCA | CTCATAACAC | TTCCACGTGG  | GACTACCAAC |            |            | 400 |

(2) INFORMATION FOR SEQ ID NO: 886:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 857 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 886:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| AAGAATTTAA | ACAAAATGAT | ATTTGGAAAC | ATTTTAAAGC | TGTGAAAAAT | AATCATGTTT | 60  |
| ATGACTTAGA | GGAAGTGCCA | TTCGGTATTA | CAGCAAATGT | TGATGCTGAT | AAGGCAATGA | 120 |
| CTCAATTATA | TGATTTATTT | TATAAGGATA | AAAAATAGTG | AGTTGATATG | ATGATAAAAA | 180 |
| ATAAAAAGAA | ACTACTATTT | TTATGTTTGT | TAGTCATTTT | AATCGCAACT | GCTTATATTT | 240 |
| CGTTTGTAAC | CGGTACAATT | AAATGTGCAT | TTAATGACCT | ATTIACAAAA | TTTACAACTG | 300 |
| GTAGCAATGA | AGCAGTGGAT | TCAATCATTG | ATTTGCGATT | GCCACGTATA | TTAATTGCAT | 360 |
| TGATGGTTGG | CGCAATGFTA | GCAGTTTCTG | GAGCATTATT | ACAAGCAGCA | CTACAAAATC | 420 |
| CTTTGGCAGG | GCGAATATCA | TTGGCGTTTC | CTCAGGTGCA | CTTATAATGA | GAGCCTTTGT | 480 |
| ATGTTGTTTA | TTCCACAATT | GTACTTTTAC | TTACCATTAT | TAAGTTTTAT | TGGAGGTTTA | 540 |

ATATTAGTAG GTGTTGCGTT ATTCGTATTA TTAAATGGTG TTTTAGAAAT TTAACTCAA 660  
 AACCCTTTAA TGAAAATTCC TCAAGGCTTA ACAATGAAAA TATGGAGCGA CGTATACATA 720  
 5 TTAGCAGTAT CAGCATTATT GGGATTAATA TTAACATTAC TATTGTCCCC TAAATTGAAT 780  
 TTACTAAATT TAGACGACAT ACAAGCGCGA AtATCGGTTT TAATATTGAT CGTTACAGAT 840  
 GGTTAACAGG GTTATTA 857

10 (2) INFORMATION FOR SEQ ID NO: 887:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 675 base pairs  
 15 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 887:

GATTTATTTT AATATTATTG TTAGAAGGAA TTTTACAAA TTCAGCGAGT GCAATCGAAT 60  
 ATTCAGACTT ACATCATAAA AGTAAGTTTG ATTCAAAGCG TCTAAGTAAT GCTAAGATGT 120  
 25 CATTTCATCA TCCAACCTCAG CTTGAAAATA AAAACACAAA CGATAGACTG TTGAAGCATG 180  
 ATTTGTTATT TCATGACATG TTCGTAAATG ATGATTGGAA AAAGGATTTT AAAGTTGAAT 240  
 TTGAAAATGA GGCACCTTCA AAGAAATTTA TAAATAAGGA TATCGATATA TTTGCTGGAA 300  
 30 ATTATGGATA CGGATGTCAT GGGGGAGCAA CCAATAAAAC GCAATGTAGT TATGGTGGTG 360  
 TTACTTTAAG TGACAATAAT AAATACGATG ATTATAAGAA TATACCTTGT AATTTATGGA 420  
 35 TTGACGGACA TCAAACAGAA ATAGAACTAA CTGCAGTAAA AACGAAAAAG AAAATTGTTA 480  
 CTATTCAAGA ATTAGAGGTT CAATTAAGAA ATTATTTGAA TGAGAAGTAT AAGTTGTACG 540  
 AACAAAGGTG CGACATTGTT AAAGGGTATG TTAAATATTA TAATGATGAT GAACAAAATG 600  
 40 TAGAATATGA TTTTATAAAT TTAAATGGTG AGTATGGTCG TGAGGTATTA AAAATGTATG 660  
 CnGATAATnA AACnA 675

(2) INFORMATION FOR SEQ ID NO: 888:

45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 851 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 888:

55

AATTCCTAAT TAACAATGCC TTCATTTAAA AACCTTCTTC CATCAATTG ATGTTTTTCAT 120  
 GATATTTAGG TTTTCTCTTT TCAAGATAAA CCATTAAGTY CTCAATAGAA GGTGTAGTGA 180  
 5 TATTCACTTT AkGACCTAAA ATTTCTTTAA ATACTTGCGC ATGTTCTGTT AATCCTATAA 240  
 ATCCCGTACG CTTATGTTCT TCATAAATAA GTAGAGATGC TAATTCATCA TCAAGGTCCT 300  
 CAATAGCACC ACTCACAAC TGAATGATAT AATCAGCTAT TTTTCTTAAA TCTGAGATAA 360  
 10 TAACCTCACC GTCACTTAAG TGAATGATAT AATCAGCTAT TTTTCTTAAA TCTGAGATAA 420  
 TGTGTGTCGA CATGAATATT GTTTTATTTT CATCAATTAA TTCTTGCTGA ATTATCTCCA 480  
 ATAGCTCATT TCTAGCTAAG GGATCGAGAC CTGAAGTAGG CTCATCAAAA ATATACAATT 540  
 CAGCATGATG TGAAAATGCA ACTGCTAGTG ATAATTTTCAT TTTTCATCCA GTCGAAAATG 600  
 TTTTATTTGA TTTATTGATT GGTAAATCGA ACTTTTCAAG ATAAAATTCA AATACTTGAT 660  
 20 GGTCCCATTT ACGATAAAAA GGGGcAATCA TTTTTCaAG TTGCTTCGTA GTCCATCTCT 720  
 CATTAAAATA ATTTTCAGAG TAAACnAACC CAATTCTATT CTTTAACTCT ATCGGATTGA 780  
 GAGCCATATC CTCTTCTAAT ACTCTAATAA CACCAGTTTG TGGGTGATAC AAATCCATAA 840  
 25 TTAACCTAAT n 851

(2) INFORMATION FOR SEQ ID NO: 889:

(i) SEQUENCE CHARACTERISTICS:  
 30 (A) LENGTH: 362 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 889:

AATCACCTTC ACGCCAATAT TGATTTTCAT GCGTAAATAC TTGTGCCGTT TCATGATACT 60  
 40 TTGTCAATCG TGCGTGTTGC TGGGGGGAAT ATTTTTCAGT AGCCCAATTG GCTGCATGAC 120  
 CTTCAATGGC TAGTTCAATT GCAGGATTAA TTAAATCTTC CAATGACAAT TTAGCATAAC 180  
 GCTTGTGAAT ATAATCAAAC AGCTTTGGAA TTGCTGGCAC ACGACAGTTT TACCATGTGT 240  
 45 AGTCATATCA AAAAATGATT TATATTCGCC TGAATCAnCT AGATAAAATT GGTGGGCTAC 300  
 ATGGTCAGGG TGCTGGCTCA CGGTGCATCA AACGcGnTA ATACTGCCCA GTACCTTTGC 360  
 50 TC 362

(2) INFORMATION FOR SEQ ID NO: 890:

(i) SEQUENCE CHARACTERISTICS:  
 55 (A) LENGTH: 747 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 890:

|    |                                                                    |     |
|----|--------------------------------------------------------------------|-----|
|    | TTGGTTTATT CCCAAAAAGT ACGCGAAAAT TAGTAGAGAA GAATTTGAAA GTTTAAATAT  | 60  |
| 10 | TGTCAAACCC GCTAAAAATA ATACTTTCTG GCCTGTTGCA GGATTTGCAG TGTATTAAAC  | 120 |
|    | AACCTTAACA AGAAAATATA TCTATTTGCT TAACATCCAT TTAGAAAAAG AAATAGTTAT  | 180 |
|    | ATTAAACATGC TGTATGATAC TTCTAGGTGT TTTCGCATTG TTTATATATA TAAATACAAA | 240 |
| 15 | ATTGAAGTTA CATATTTTGT ATAAAAATAA AAGTAATAAC GAAAAGATCA TATTAATACC  | 300 |
|    | TACATTTAAA AATATTTGTT TATCCTTATT TGCTTATATA TTATTTGGTG GATTGTCAAC  | 360 |
|    | AATGGCTCTG AGTATGTTAG TAACTTCATC CCCTCAAAT ATAATAGAAT TTCTTGCTTT   | 420 |
| 20 | AATTGGCATG ACTGCATGCT TCTTTCTACT GAATATGTCA TCGGTTCTAG ATAAAAAAAT  | 480 |
|    | TCATGTTATT TTA AAAACAA ATAAGTAGTA AAATTGATTA ACTTAGGTAG TATCGGATAC | 540 |
| 25 | TTAAATGTTG GTTCATAAAA AGCAATGATT TTAAATCGAG GAGCTATCTT AGAAcAGGGA  | 600 |
|    | AATAAAACAG CCAAAGTTAT AAAAAGTGAA TTAATAACTA ATTATATTAT GTTAGCCACG  | 660 |
|    | CTTCAAATAA AAnATAATTA GAATAAGGTG GGATTGATAA TCAAnGCTAn GCGAATCTAA  | 720 |
| 30 | AATCATCAAT AAAAACCCCA AATATAG                                      | 747 |

(2) INFORMATION FOR SEQ ID NO: 891:

|    |                               |
|----|-------------------------------|
|    | (i) SEQUENCE CHARACTERISTICS: |
| 35 | (A) LENGTH: 526 base pairs    |
|    | (B) TYPE: nucleic acid        |
|    | (C) STRANDEDNESS: double      |
|    | (D) TOPOLOGY: linear          |

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 891:

|    |                                                                   |     |
|----|-------------------------------------------------------------------|-----|
|    | ATTTTGAAAT TTTAGCAGAT ACTGATAATG GTCTCGATGC AATGAACTT ATTGAAGAAT  | 60  |
| 45 | ATAATCCTAA CGTTGTTATT TTAGATATAG AAATGCCAGG CATGACTGGA CTTGAAGTTT | 120 |
|    | TAGCGGAAAT TAGAAAAAAG CATTGAATA TTAAAGTGAT TATTGTAACA ACTTTTAAAA  | 180 |
|    | GACCGGATA CTTTGAAAAA GCAGTTGTGA ATGAtGTGGA TGCATATGTT TAAAAGAAC   | 240 |
| 50 | GTTCTATAGA AGAATTGGTG GAAACCATTA ATAAAGTAAA TAACGGAGAG AAAGAATATA | 300 |
|    | GCGCCACATT GATGACTTCA TTTTGTAG ATAAAAACCC ATTAACGCCC AAAGAACAAA   | 360 |
| 55 | TTGTATTAAG GGAAATTGGC AaTGGTTTAA GTAGTAAAGA AATAAGTGAA AAATTATTTT | 420 |

ATCGTTTTGA TGCTTGGGAA AAGGCAAATG AAAAAGGCTG GACCTA

526

(2) INFORMATION FOR SEQ ID NO: 892:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 751 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 892:

|    |                                                                   |     |
|----|-------------------------------------------------------------------|-----|
| 15 | TATTTGATGT AAAAGCGAAn GAACCATACA ATGTAACAAT TACTAGTGAT AAATACATCC | 60  |
|    | CTAATACTGA TTTGAAACGT GGGCAAGCTG ATTTATTTGT AGCGGAAGGT TCTATCAAAG | 120 |
|    | ATTTAGTGAA ACATAAGAAG CATGGTAAGG CAATTATAGG AACGAAAAAA CATCATGTTA | 180 |
| 20 | ATATTAAGTT ACGTAAAGAT ATTAATAAAA TCTATTTTAT GACAGATGTT GATTTAGGTG | 240 |
|    | GACCAACGTT TGTCTTAAAT GACAAAGACT ATCAAGAAAT AAGAAAGTAT ACAAAGGCAA | 300 |
|    | AGCATATCGT CTCTCAATTT GGATTCGATT TGAAACATAA AAAAGATGCT TTAGCATTAG | 360 |
| 25 | AAAAAGCGAA AAATAAAGTT GATAAATCTA TTGAAACAAG AAGTGAAGCG ATAAGCTCAA | 420 |
|    | TATCAAGTTT AACCGGAATA TTATTATTTG TAACATCATT TTTAGGTATT ACATTCTTGA | 480 |
|    | TTGCTGTATG TTGCATTATA TACATAAAGC AAATAGATGA AACCGAAGAT GAGTTAGAGA | 540 |
| 30 | ATTATAGTAT TTTGAGAAAG CTTGGATTTA CACAAAAAGA TATGGCAAGG GGAATAAGT  | 600 |
|    | TTAAATTAT GTTTAATTTT GGGTTACCTT TAGTTATTGC ACTATCACAT GCATATTTTA  | 660 |
| 35 | CATCATTAGC ATATATGAAA TTAATGGGTA CAACGAATCA AATACCGGTT TTCATAGTAA | 720 |
|    | TGGGATTATA CATTTGTATG TATGCTGTTT T                                | 751 |

(2) INFORMATION FOR SEQ ID NO: 893:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 357 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 893:

|    |                                                                   |     |
|----|-------------------------------------------------------------------|-----|
| 50 | GGATGTTGTA CATTATTCAG ATTACTTTGA AGGGGCACAA AAATATTGTA GCTATTTAAA | 60  |
|    | ATCAACAGTA GATGTAACT TTGAAGGTTT GAAAATTGCT TTAGATGGTG CAAATGGTTC  | 120 |
|    | AACATCATCA CTAGCGCCAT TCTTATTTGG TGACTTAGAA GCAGATACTG AAACAATTGG | 180 |

TAGCTGAAAA AGTAGTTGAA ACTGAAATGA TTTTGGGGTT AGCATTGGA CGGCGATGGG 300  
 AGACAGAnCC ATAGCAGTAA GATGGAGAnG GnCCAATCCG TTGACGGTGG ACCCAAT 357

5

(2) INFORMATION FOR SEQ ID NO: 894:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 464 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 894:

15

GCTAACCTGC AAAATTCGAT AAGCGATTCA ATaCTGAcGC CTGcATTTCG CAAATTTTTTC 60  
 ACTAAATAAA TCCAATTTAA ATCACTATCA TTATATATTC TATATCCATT TTCATCTCGA 120  
 TTAAGTGGTG GAATCACACC AACCTTTTCA TAATATCTTA AAGTGTCTTG AGATATATTC 180  
 ATGAGCGCTA CGACTTCTTT AGTTTTTCATT GCGACTATCC TTTCAGTTAT GTTTGGTCGT 240  
 CTAAAGTAAT GTTGCTTTAT ATATTGTCAT CTTGTTTGA ATACTTCTTA TTTTATTACT 300  
 CAAATTTAAA TTTGTCTCTT TTTTAACATT TTACATTTCA TCGTTTTTAA TTACTTTAAA 360  
 AATTGTATAA CTkAAATATT TAAAATGATA TAAwCACTAA GATTGaTAAT AtTTAATTnT 420  
 TTGGAATAAT ATnTTAAGTT GCCAATTTTG GGGGGATGCG GAAA 464

30

(2) INFORMATION FOR SEQ ID NO: 895:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 599 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 895:

40

AnAATGAAAG AGTTACAGGA CTTTATTGCT CGTTTCTCAG TAACGCTTCT AAATCTAAAC 60  
 AAGCAACAAG TCGTAAAAAA CAACTCGAGA AAATTGAATT AGATGATATT CAACCATCAT 120  
 CAAGAAGATA TCCTTTCGTT AAATTCACAC CTGAGCGCGA AATCGGTAAT GACTTACTAA 180  
 TCGTTCAAAa TCTATCTAAA aCGATTGACG GTGAAAAAGT ATTAGATAAT ATTTCAATTCA 240  
 CAATGAATCC AAATGATAAA GCAATTTTAA TTGGGGATAG TGAAATTGCG AAAACCACAT 300  
 TGCTTAAAAT ATTAGCCGGT GAAATGGAAC CAGACGAAGG TTCATATAAA TGGGGTGTA 360  
 CAACGTCATT AAGTTACTTC CCTAAAGATA ACTCAGAATT CTTTGAGGGC GTTAATATGA 420

55

GCGGCTTCTT AGGCCGTATG CTATTTAGTG GAGAAGAAGT TAAGAAAAAA GCTAGTGTAC 540  
 TTTCAGGTGG AGAAAAAGTA CGTTGTATGC TAAGTAAAT GATGTTATCA AGTGCAAAC 599

5

(2) INFORMATION FOR SEQ ID NO: 896:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1057 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 896:

15

TCATTAGTAG AAATCGTTAA AGATGCATCT TGCAATTTAA AATCCGAATC TTTGTATTGT 60  
 TTGTTACACAC TATCTACGTT TAACAATGTT GTCATATCCA TGCTCCTCTT TGTTTAATTT 120  
 20 TAATAAAAAC GTCTTCTCTT CAATAAATAA CTAAAGGCGT TATATATGAA AATAGCAATG 180  
 ATAAGTAGCA AACTAAAGCT TTGATTAATT CCAAGTAGTAA TTGAATAAAG CCCAATTACT 240  
 ACAATGGCTA GATCAATAT TGATAAGTTG ATCGCATATG TTTTAAATAA TGCAATTAAT 300  
 25 TCTATATGGC GTTACCTTC ATCCAATATT TCCAATCGCT TTTCAGTGTA ATTCTTATCT 360  
 GCAATTTTTG GTATTCTGTC ATCAAACCTT CTATTAAACA GTGTAAATTG TGTATTGAAA 420  
 ATAGCACTAG CAAAAAATGG TATTAAAAAG AATAGTATTG CATTTGCTGC AGCGTGCCCT 480  
 30 ACCACAAAAA TAAGCAATAC TAAAAAGCA ATAAGTGTCT GCAGAATACT TAATATACTT 540  
 CCATTTAAAA CATAACGATT CGCAAGCAAC TCATATTGAT CTGTTGCATC GATATCTACC 600  
 TCTTTATCTA CAAGTTGCTT ATACTTCAAT GCACGTCTTT GATTCATCAA AACAATGGCT 660  
 35 TCTACCAATA TGATAATAAT CGTCGCAACA ATCGATATTA CAACGACATT GTTATATGTC 720  
 GCAAACGTCA AGTTCTCAAT ACCAAATCCA TCAAAATTAC CTAAAATTCC ACCTATGATA 780  
 40 CCCCTACAA GTCCACCCAG TAAAGATAT CCGATATATC TTAGTATTTT CATGCCTCAT 840  
 CCTCCTCAAT AATAAAAACA GTTCCACCG TTTCATTGAA AATGCGAGCA ATTTTATTG 900  
 CCGTTAATAC TGATGGCATA AAATTGTTTC GCTCAATTAG CGATATGGTT TGTCTTGAAA 960  
 45 CGCCCGCTTG TTTAGCAAGT TGCCTTTGGT TTAAGCCATC TCGTGCTCGT AATTCTTTCA 1020  
 ATCGATTACG CACATCGCAT CAACTCCnTA ATTACAC 1057

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(2) INFORMATION FOR SEQ ID NO: 897:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 336 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 897:

```

5  AAATTATTGA GTTAACAAAT CATTACGGAG CACATAATTA TTTACCATTG nCAATTGTCA      60
   TTTCAGAAGC CGAnGGGGTA TGGGTAAAG ATCCTGAAGG CAATAAATAT ATGGATATGT      120
   GAnCTGCATA TTCCGCTGTT AACCAAGGTC ATAGACATCC GAAAGGTATT CAAGCATTA      180
10  AAGATCAAGC TGATAAAGTG ACTTTACTCT CACGTGCTTT TCATAGTGAT AACTTAGGTG      240
   AATGGTACGA AAAAAATTTGT AACTGGCAG GTAAAGATAA AGCTTTACCA ATGTAATACA      300
   GGTGCTGTAA GCAGTAGAAA CAGCTTTGAA AGCAGC                                336

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(2) INFORMATION FOR SEQ ID NO: 898:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 898:

```

   TGnTGnTTTC TTATTGTTGA CCAATTATTT TGCATACCAA ATCCAAATCA TGTATTTATC      60
   AATCACATCC TAATGCTAAA TCCAATGTAT TACATTGTTT AATGGTATAG CACAATCTAT      120
30  CATATTTGGT ATATCAAGTA TGGAAAACAT TCCATATCAT TTTTACTTTA TTTTATTCTT      180
   ATGTTTAAATA GCTGCAGTAA ATTTCTGATT AGCAGGTATA CGACACACGG CAATTTATAA      240
   TAAAACATCT AAAGTGACAC AACTGATAA TCAACAGGGA GTTTCAAAGA TAGTCAGACG      300
35  GG                                                                302

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(2) INFORMATION FOR SEQ ID NO: 899:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 899:

```

   CCACTAGCTG ATACAGTAGG TATACCAAGA TTCGTCATCG TTACGACATA TCAATTGGT      60
50  CAATATGCGA TGTTATTCTT AGCGCCGACT GGAcTTGTTA TGGCCACACT ACAAATGTTA      120
   AACATGCGAT ATTCACATTG GTTCCGATTT GTATGGCCGG TAGTTGCTTT TGTATTGATT      180

```

55



TATAAAAAAT ACTAATGGGG TTTTATGCAT CTCGTAGGTT TGTAGAAATA CTAAACTAAG 300  
 CGAGGTGCAT TATTATTTTT GATTAAAGAAA ATAATGACGG TAATGATAAC ACTAGTAAGT 360  
 5 AATTGATACA ATGCTCTATT TAATAATGAT ATTTTAAAAA TTTGTTTTTA ATGTAATGTT 420  
 AGATCTATGG TATATTATAT TTAACGTGGT AAATATGTAT TTGCTGTAA 469

(2) INFORMATION FOR SEQ ID NO: 900:

10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 821 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 900:

20 CTTTATTGGT AACTCTCTAT aATATtTTaA CATTTTTACG CTATCGTGCA AACGCAAcCa 60  
 CTTTGAATTy TCTGATATTT TTAGCATATA ATTTACACCC TGCACGATGA ATTGTTAATC 120  
 CAGTTGTATA AATATCGTCA ACGAGTAATA TTTCCTTACC ATTTAAATCT AATTCCGTAT 180  
 25 CAATAATAAA TGGATTTTCA TCTGCCAGAC GCTCTTTCTT AGTTAAATGA GACTGTTTTG 240  
 GTCTATTTGA CATCTTTAAA ATCTTATCaA AGCGAATCCC TTTAGCTTTT AGTACTGCTT 300  
 CTACCGGGTT AAATGTTCTA GATAAATCAT GTGCCGGCGA AGAAGGAATT GGCACAATAT 360  
 30 AGTCATAAGA TGTTTGTGGT ATTTCAATCA AATGTGCCAA TAATTCACAT AAATAATAGT 420  
 CTTTCAAAAA TTTTACTGA TGTATCATCT CTTTCATTAA ACCGTCATAT TGAAATTGAC 480  
 AATATAATTG TTCCATTAAA TTAAAGTGTG CCGATAGAAA CTTGCAGTCT AAACAATACG 540  
 35 CTTTCATCTG ATTTAAGTGT TTTAAGCACC TTGAACATCG CCTTGCTTTA ATATCAAGTT 600  
 TAATATTGTC CCAATTCTCT TTGCATCTGT CACATAATCT ATTAGGTTTC TTGAACAAAT 660  
 TATAAATGGT TATATTTTCA TATAACTTAG CACCACAACCT CAAACAATTA TTCATCAATC 720  
 40 CAACCTCTTT TTAATGCTAA TTTGTTTCATC CTTTGAATCT CTTTTTTAGC TTGAATCATA 780  
 TTCATACTTA CCCCTTnCAT GAAAAACAA TACTTTTTCC A 821

45 (2) INFORMATION FOR SEQ ID NO: 901:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 349 base pairs  
 (B) TYPE: nucleic acid  
 50 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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TGATGCTATT AAAAAGTTAA TTGTGCGGTC TGTTTTGATA ATTTTAATAA TAACTTCAGG 60  
 TAACTAAAAA TCCTAATATT GAAAAACAA AGCCATTTAA AACATAACCT AGTATATTCC 120  
 5 ATGTATGATT GTAACCTATT TGCCAGTTnT GTACTGACTT GCATAATTCT GTCACGTnCG 180  
 AACCATGTAC AAGCCTGCAA CTACTGCTGA ATGATTCCCTG ATGCGTGAAC AATTCAGCAA 240  
 TTAAATACGT AACAAATGGT GTTACAATTG AATAATTGAA ACATATTAAT GTTTCATATC 300  
 10 CTCGACGnCA TCAATGTTAA TCCGGACCTT ACTAATGCAT ACCTATAAG 349

(2) INFORMATION FOR SEQ ID NO: 902:

(i) SEQUENCE CHARACTERISTICS:  
 15 (A) LENGTH: 390 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 902:

CAAGTGGTAT AAATTTACCT GGTGAAATGT AGGTCGTGGT GGCGATGATA CATTATTTCGC 60  
 25 TAAAATCGAC GGCGTTGTTA AATTCGAACG TAAAGGTCGC GACAAAAAAC AAGTTTCTGT 120  
 ATATGCAGTT AGCTGAATAA TTTTGTCTAG TTAACACCAG AAAGTGAATC TTCTGGTGTT 180  
 TTTTACTTTT TATAAAATGT TTTTCATTAT TATTTTCATT ATGnTATTTA AAAATGGGGA 240  
 30 TTTTAGACGT TATACTAAAT GTGCACTGTA TAGGGGCCCT AATCACTAAC TATAGGGGGA 300  
 CAAGGATACA GTGCAGCGTT AAGGATAACT GnCCACATTG GTCTGGGAAT ATAGGATTTA 360  
 AGCAAGGTTA TAAAGTACTC nTAGGCCCTA 390

35

(2) INFORMATION FOR SEQ ID NO: 903:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 334 base pairs  
 40 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 903:

GGAATAGACG TATATGCGCG TTGAATTTAA TCCTAATAAG CTTTCGCATG ATGAAGTGCT 60  
 TTGGTTAAAA CAAAATATCA TCAGTTATTT GGACGATGTT AGTTTTACGA GATTAGATTT 120  
 50 GGCTTTTGAT TTTGAATTTG ATTTAAAAATG ACTATTATGC ATTGTCAGAT AAGnCGGTAA 180  
 AAGAACTAT ATTTTATGGC CGAATGTAAA ACCAGAACAA AATATTTTGG TGnCGAATA 240

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GATTCACATT CTATGCGGTG GAATTGATTA AACG

334

(2) INFORMATION FOR SEQ ID NO: 904:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 334 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 904:

CAAGTTGGGG ACACTGTTTC AAATGAAACA ACAGTGTGTA TTTTAGAGGC AATGAAACTA 60  
 TTTAATGAAA TTCAAGCAGA AATTTAGGT GAAATTGTTG AAATCTTAGT AGAAGACGGA 120  
 CAAATGGTAG AGTATGGCCA ACCGTTATTT AAGGTGAAAT AATGAAAAAG GTTTAATTGC 180  
 AAACCGCGGT GAnTCGCAGT TAGGATTATT CGCGCTTGTC GTGATTTAGG CATCCAAACT 240  
 GTTGCATCTT TCTGAGGGGA TAAAGATCGC TACATCTCAA ATGCTGATGA GGCATATnCG 300  
 TGGGCCnCTT GTCTAAGGTC ATATTTAATA TCCG 334

(2) INFORMATION FOR SEQ ID NO: 905:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 905:

TTCACCCTGT AATTCTTaAC CGTCAATTGA CCTTTATGCA GATTTAATAT TCCTAAAACG 60  
 TATAACTCTT CTAATGATAA TTGACACATA TTTAAATAAC ACTTTAGATT CCGCAATAAT 120  
 TCTTGTGACG ACAATAAATA CGATACATAG TCACAACTAA AATCAAATGT ATATTGACCA 180  
 AAATAACGTT CAATATAGTC ACTAAGCTCA TTATTCATAT ATTCTATTTn ATCTATATGC 240  
 ATTTTATTAA TCGAAATAGT CAATTTACGT TGATCCCTTT GATCTCTTCC TTTCAATAGC 300  
 CATTGATGAT TGThTAAATA ACTTAACATT TGAAGAAGGG CCATCTTAGA TTGGATTCT 360  
 TTCATThTTA ATAACTATC TATTGAAGCG CTATTGGAA 399

(2) INFORMATION FOR SEQ ID NO: 906:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1478 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 906:

5 TACATTTTTC AATTATGGC AAAATnCACa ATTTTCATCG AAATATTTTG TanAnAATCA 60  
 TTGCTAGGTG ATGAGTTATC TCGGTTAATT ACAAACGAT ATCTAAGTTT AAATATTAGA 120  
 TCATAAAAAA ACTATCTACT GAATATCCCT CCATAGCATC ATTTTTCTAA GCAAAAGTTA 180  
 10 AACTTAGTTA GATAAAATGC AAATGAGATT ATTGTAGATA GTCTCTTTT AATGTTTAAA 240  
 AATGATTAAT GCCaTAAACA TAAATAATTC CaAAGAATGC CGCGCCACTA AGCACTGTTA 300  
 ATATAAGACT TAGTAACAAT GTGCGTTTAT AATGTTTaAC AAATGCTaTG AACAAAATGA 360  
 15 CTACATTATA CGCAAAGAAA AGTCCGAATA ATGTCATTGT TATTTTCAAA TCAGAATAGA 420  
 AAATATTTTAA TAGTAATACA ATGACTGCAT AAATTAAATA CGGAATAACT ATAAATTTGC 480  
 GTTCAAATCT TAATTGTTTCG AAaCGtTTAT CTTCGTTTGT CATGATATGC TCCTTTATGA 540  
 20 TTTAAAAGTA AATAAGTTTA CGGAaTATCT TGTCCGaTAA TAGCGGTGTA AAtGTCAAAC 600  
 CACGACTGAT CATCTaAAAT AAGTkGTAGC CctTCGATTG CTTGATCAAT ACGCTTTAAC 660  
 TGACTTGTTTC CAAGTATCCG GCATGATACG ATGCGGTATT TTTACTAACC ACGCTATCAT 720  
 25 CACAGCTGTG TCACTyACAC mATATTTGTC AGCTATTGAT TGAACAACtT TCATAATACG 780  
 TTGCGCTTTA ATATCTTCCT TGTCGAAAAT TTTACCGCCT GCAAAAGGAC TCCAAGCCAT 840  
 GATTTGAACA TGGTTTTGAT ACATTGAATC CATTGTTCCA TCTTGTAAC TATCAACGTG 900  
 30 ATATGGCGAT AATTCTAATT GATTGATGCT AATATGTAGT CTTTCTTTCA TAATATATTG 960  
 ATTTAACAAT TGGTATTGTG AATGATTAaA ATTCGACACC CCGAATGACT TCAACTTACC 1020  
 35 TTGTTTAACA AGTTTAGTTA ATGCATCAGC AACTTGTCTT GGaTCCATCA ATGGTGaAgG 1080  
 ACGATGAATG AGTAGACTAT CTAAATAATC TACATTCAAA TTGATTAATG ACTGTTCAAC 1140  
 AGATTTACG ATGTGCTTAC TACTCAAATC ATAACGATGT CCATTTGTAA AATCAAATTG 1200  
 40 CTTAGAAGGC AAAATGATAC CACATTTCGT AACAAATTGA ATTTTATTTT TTAATTCGGG 1260  
 TGATAAATCC AAAGCATTAC CAAACAGTGA TTCACATTGA TAATCTCCAT AAATATCAGC 1320  
 ATGATCCATC GTTGTAATTC CACGTTCAAC TAATTCAATT ATAAAATAAT TTAACtCTTT 1380  
 45 CGCAGTCATC TTCCATTCAT TTGCACGCCA AAAACCTTGT ACAAGCCTAG AAAAATGAAC 1440  
 ATAGTGATTA ATCATTATTT GTTCCATATn TCATCCAC 1478

(2) INFORMATION FOR SEQ ID NO: 907:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 543 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 907:

|    |                                                                    |     |
|----|--------------------------------------------------------------------|-----|
|    | TTCTATGAGA ATAGATATTG TTAAATTAAG AAAGTAGTCA ATTTTATTAT GACAAAAGAA  | 60  |
| 10 | AGAAGAACAT TTAGTTCAGA GTTTAAGTTA CAAATGGTTA GATTATATAA AAATGGTAAG  | 120 |
|    | CTTAAGAATG AaATTATACG AAAGTATGAT TTAAAACCCCT CAATTATCTC AAATTCGATA | 180 |
|    | AAACAACACC AAAATACTGG ACCCTTCAAT CATCAAGATA ATTTAAAAAG TGATGAAAAA  | 240 |
| 15 | GAGTTAATAA AATTACGCAA AGAAGTTCAA CATTTAAAAA TGGAACATGA TGTTTTAAAG  | 300 |
|    | CAAAATTTTAA AGTTGATTTA GAAACTGAAC TTTTTAAAGA TACATTACTT GAAGATTCTA | 360 |
|    | ATTTATCTGA TTATATAAAG AACCAACTTC CAACGATATG GAGAGACTAA GAAATAGTTT  | 420 |
| 20 | AAATTTATTT AATTTCAATA AAAACTCATA ATAATATTTA AGTAAGTTAG ATTGCTTTTA  | 480 |
|    | GCATTAGGAA TTCGCTTATA ATTAGATGTT CAATATAGAC TTTTTTACAC ATACATGAAC  | 540 |
|    | TAT                                                                | 543 |

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(2) INFORMATION FOR SEQ ID NO: 908:

(1) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 751 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 908:

|    |                                                                   |     |
|----|-------------------------------------------------------------------|-----|
|    | TTTnCGGTnG AACATGATTn CGATATTACT TCTAAAACGA TTCAACCAA ACCAGGAGAA  | 60  |
|    | AGTGTGGAC GTTTAGTTAA TGTCGATTGT AAAGATACAG TACTGGAGTA TTCAGAATTA  | 120 |
| 40 | GATCCAGAAG TTGCAATCA ATTTAACAAT GCTAATATCG GTATTCATGC ATTTAACTT   | 180 |
|    | GGTTTTATTT TAAACGCTGT AAATCGTGAG TTACCTTATC ATTTAGCTAT TAAGAATTTG | 240 |
|    | AAGCAATTAG ATGAGAACTT TGGTGTATT GAACAACCAA CTTTAAAT CGAATTGTTC    | 300 |
| 45 | TATTTTGACA TATTTACTTA TGGAAGTAGT TTTGTCACGT TACAAGTTCC TAGAGAAGAA | 360 |
|    | GAATTTTCAC CTCTTAAAAA TAAAGAAGGT AAAGATAGTG TTGCAACTGC AACAGAAGAT | 420 |
|    | TTACGTAGAA TGGGTTTAAT TTAATGATAG GCGGTGACTA TGATGTCCAA ATCAACTAAA | 480 |
| 50 | AAAAGTAATG ACACAATCGT AGAAACATTT AAGGATATCA TCCCTTTATC ATTTGGAGAA | 540 |
|    | GAAATTGGTA ATGCGGCATC TCATGGTGTT GCAGCTTTGT TAACATTATT AGTGTTACCC | 600 |

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TATGTTATTT CTATCTTTAT GATGTTTATT TCATCTACTA TTTATCATTG TATGCAAAAT 720  
 GAAACACCTC ATAAATATAT TTTAAGGATT A 751

5 (2) INFORMATION FOR SEQ ID NO: 909:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 394 base pairs  
 (B) TYPE: nucleic acid  
 10 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 909:

AAATTGTCAC AATTCAGTCT AATTTAAAAG GAAGTTAATT AAAAAATTAA AAAATCATGC 60  
 ATCGTGTCAT TTAGATATTG AAAAAGATGA GTCAAATTG TTTTCATATAT TTTCCAATAA 120  
 20 CAAATTATTA TATCTAAATA TACAATCAGA AATATATGAA TAGAAATATC AATAAGAAAA 180  
 ATAATATGAT TAAAAATGAT GAATGGCATA CTTATAAAGT GTCTAAATAT TGGCGGTCAA 240  
 TATTACTTAC AAACACGAAT GTTAAGTAAT GTAGACAATG cTGaAAAAAC AATaAGTAGa 300  
 25 AACTCTATAT AGAATGTTTCG TTTTATTTTT TaATAATTGa ATAATCaTTA TTGGGTGGAT 360  
 TTTAATATGG nATTCCGGTC GGCACACCGA TTAC 394

(2) INFORMATION FOR SEQ ID NO: 910:

30 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1022 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 910:

40 TAAAGCTAAG AAAAAAGAAA AACGTAAAGC TTATAACCAA CGAATGAAAG AACGTAGGAA 60  
 AAATCAACCT AGCGCAGTTA GTCAACGTCG AATGAATTTT GAAGAGCGAC GTCAAATTTA 120  
 CAACAATGAT ATTTCTGAAG AACGCAATTC AAGTGAAGTT AAGGACAAAA AAGAGCAAGA 180  
 45 ATAAATATTG ATGATACCCA GATTAGTAAG CAGAGGTCTT TTGCTTATTA ATCTGGGTTT 240  
 TTATATGAGG TTAATTATCG ATAACGTTTA ATTAAAGTGT TTAGGTGTCA TAATTTTAAA 300  
 TGACGATTTC CCCATTACKA TACACCTAAA TtATCATCAA TCTGaATTCA GATGTTTATk 360  
 50 ATAAAAATTA GATGAAAAAT ATGTTAATAT ACAAGKaATT TAATGTGcGk ATATCTATAG 420  
 GCTCGTAGTA TACTTATTAA AATATTAAAC AAAGAAAGGA TTTTAAGATG AATAGAAAAC 480

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GGCTATCCTA TTTTCTTTA AAAAGTGGTA ATGCATCACA ACGTGAAGAA TTAGCGAAGC 600  
 AATTATCTCA GAACGGTGGC AAGGTTTCTT TAGATATGCT TCAGACAACA ATGGGTGCAT 660  
 5 TAGCAATTAT TTTATTAATT TCAACACTTT ATGGTATATT TCGGACAATT TGTATTAAAG 720  
 GACGTAGAAA ATTATCGATT ATACTTTTTG TTATCGCGAT AATTGTAAGT TTGATGGCTC 780  
 10 TTAATTTAAT TGCAATTGTC TTATGGGTGA TCGTGATGAT TATGTTGATT TCTAAAAAAG 840  
 AATCAAAAGA AACACACAT AAGGACGATG AGTATATTTA TCATTAAATAT GTTCATAGCA 900  
 AAAGAAAAC CATTAAATG TTAAGTTGTT AATTATTAGA TACAACCAAC ATTTTAATGG 960  
 15 TTTTATTTTT AACTTTGTAG TTCTTGAAT GTTTGAACGA TTAAATAGAC ATTTAAAATA 1020  
 CT 1022

## (2) INFORMATION FOR SEQ ID NO: 911:

20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 274 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 911:

30 GGTACTTTAT TTTTATTTTT GGTCTTAGTG ATTTTACAT TATTTACATA TAAAGCGCCT 60  
 AATGGTATGC GTGCCATGGG TAGCATTAGC TAATGCAGCA ATCGCAACAT TTTTAGTGGA 120  
 AGCATTTAAT AAATATGThG GTGGCGAGTA TTCGGTATTA AATTTTLAGA AGAGCTAGGA 180  
 35 GACGCTGCGG AGGTCTAGGT GGTGTCGCTG CCGCTGGATT AACAGCATTG GCTATCGGTG 240  
 TGTCACCACT ATATGCATTA GTTATAGCAG CCGC 274

## (2) INFORMATION FOR SEQ ID NO: 912:

40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 679 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 912:

50 CTTAATTGT TCACTTTATC ATTATTATCA ATCAACTCTA TGATATGAAA TTGTGTTAGA 60  
 GATAAATCTA GTTCCTCATT TTCCTTTTTA TACTGTCTTC TTTTATCGGC ATTTTCTCTT 120  
 TCTATAATAA ATTGTTGTAA TTTTAAAATA ACTTCTCTCT TCATATCCAC TATTATTCCT 180

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TTGTTGTAAT TAACATATAT TTAAGTAGTT ATGCACCATT TATTCCGCAT TTCACAAATC 300  
 CACCTATAAT ACAAACTATC ATTTTAAATA AGCAGAATTT ACCCTGTCTT CCACACAAAT 360  
 5 TGTTTTTCGAC ACTTTAATGT GCCTACTATC CAAAAAAGTT ACTCATAACA AATTGCGCAT 420  
 TTTAATAAAT GTAGCAATGC CATTTCATG CTGCAAAAAT ACTCGTATTC ATATTTATGT 480  
 10 TTTATATTAT TAAAGTTTTT TAAATCCATA TTTTATAAC ACTTGCTATG TGATAAAATT 540  
 AATnTTATAT ATAAAATCTT AAGATTCAGA TTATTTAATA GCAAAGGAGA TAGTGATATG 600  
 GATGTTTTAA CAATAGAACA TTTAACAAAG AAGATAGGCA ACAAACGAT TCTCGAAGAT 660  
 15 GTATCATTTA AGCTGAAAC 679

(2) INFORMATION FOR SEQ ID NO: 913:

(i) SEQUENCE CHARACTERISTICS:  
 20 (A) LENGTH: 564 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 913:

GCCATCCTTC AGTGCTAATT TTTTCAAATT CTAATGCAGA TGCACCACTA ACCATACCAT 60  
 30 ATATAAAGAA AAAGACCACG AAAGnAATAA GTAGTAGTAT AGATGCACAT ATCATAATGA 120  
 CATTGGAGTT TTCAGCGCCA AATTTAAATG TCAATGsGAA AATGATAGAG TATGCCCCTA 180  
 TGATACCAA ACTCATTAAC CCTGACATAA TACCAATCAT CACACTTTGG GTCACAATCG 240  
 35 TAGTCACAAC TAATCCAATC ATTAACTTG CACCGAATAA GATTAAATAA AAGGCAAAGT 300  
 ATGACTTAAT ATAATCACTA CGTTTAACCG GTAAAGTAGA TACATAATAC ATCCATCTTG 360  
 AGTCTTTTTT aTGTTTAATA TTATCAGTAA TAGGTGTGAT TAACATAACC CCAGCCATkG 420  
 40 CCGAACTCAT CAACGGATTA AATACTGCAA AGTATCCTGC AGCTATAATA GCGACTATAA 480  
 AATAAATATA TGTTTGChTT CTCGTTGCAT AAAAATACT TAGGAACATA CCTTTCATTA 540  
 45 TACTTCACCT CGCATTATGA TTTT 564

(2) INFORMATION FOR SEQ ID NO: 914:

(i) SEQUENCE CHARACTERISTICS:  
 50 (A) LENGTH: 643 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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AAAGAAGAAG CAAGTGCAAA TAATTTAAGT GATATATCAC AAGAGGCACA AGAGGTTCAA 60  
 GAAGCTAAAA AAGAAGCACA AGCAGAGAAA GACAGTGACA CATTAACTAA AGATGCAAGT 120  
 5 GCAGCAAAGG TAGAAGTATC AAAACCAGAG TCACAAGCTG AAAGATTAGC AAACGCTGCA 180  
 AAACAGAAGC AAGCTAAATT AACACCAGGT TCAAAAGAGA GTCAATTAAC TGAAGCGTTA 240  
 TTTGCAGAAA AACCAGTTGC TAAAAATGAC TTGAAAGAAA TTCCTCAATT AGTTACTAAA 300  
 10 AAGAATGATG TATCAGAGAC AGAGACGGTT AATATAGATA ATAAAGACAC TGTTAACAA 360  
 AAAGAAGCTA AATTTGAAAA TGGTGTATT ACACGTAAAG CTGATGAAAA AACAACTAAT 420  
 AATACAGCTG TTGACAAGAA ATCAGGTAAA CAATCTAAAA AAACAACACC TTCAAATAAA 480  
 15 CGAAATGCAT CAAAAGCATC TACAAATAAA ACTTCAGGTC AGAAAAAGCA ACATAATaAG 540  
 AgATCATCAC mAGGTGcAAA GaAACAAAGT AGTTcmAGta AGTCaACTCA AAAGAATAAT 600  
 20 CAAACTAGTA ATTAAGAnTT CAAAAACAAC AAATGCTAAn TCC 643

(2) INFORMATION FOR SEQ ID NO: 915:

(i) SEQUENCE CHARACTERISTICS:  
 25 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 915:

AGGTTTAAGG GAAAAATCCT ACCTGGAGAG ATTCAAAAAC TAAATGGACT ATTTCCAAAA 60  
 35 ATAAAGGGCA ATCACATGGT GGTTCCTATT GGAAGTTAAT AAATAACAAA GGAAAAAGAA 120  
 TAGCTTCTTT AACTAAAGAA GGAAAAATCT TAAGGGAATA AGGTGTTGTA AATTATGTGC 180  
 TTTGATATAA ATAATTTGGA TATAAAAAAG TTGAATTTTA GAAAGGTAAA AAACGCAATT 240  
 40 CATTTAAGTT TAAGTGGCGA TAAATACCAG TTTTGGAGG ACGGTAAAAC TATCAATAAT 300  
 ACTTATTTTT TAGCTGTATA TGATAATGCA ATAAACATTT TTGAAGATTT GTTTtCGCCT 360  
 tCTGATTCTA TAAATTTGGn TCATGTAGTA TATGTTTATA 400

45 (2) INFORMATION FOR SEQ ID NO: 916:

(i) SEQUENCE CHARACTERISTICS:  
 50 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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CCCAAAGTTC GATAGTGTAT TAGTATTATC TTAATAAAAT GTTAGGTACA ATAAAGATGA 60  
 TTATATATCG GAGGTTAGTA TAAAAATGTA TGTAGATCGA AAACCATCAC TATATTTAGA 120  
 5 GGATTTGCGA CATGATTTTA AAAATAGTTT AAGTAAATTT GAAAATGGTG ATGAAGCATT 180  
 TGATACGTTA TTAGGTTTCG TAGAGTTAGA TCATATTTAT TCGTCAGCAC TAAAGGAAAT 240  
 10 AAGCACTAAA CTGAGTATTT TAGATGACAA TTTCAATCAC ATTTATAwAC ACAATCCTAT 300  
 ACATCATATG GAGCGACGTG TGAAAGAAAT GCGTAGTTTA ATAGAAAAGC TTAATCGTAA 360  
 AGGATTACAG ATTAGCGCAG AAAC TGCCAA AGAACATATA 400

15 (2) INFORMATION FOR SEQ ID NO: 917:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 20 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 917:

GAAAATTACT ATGAAGATTG CATTAGGATG CGACCATATT GTTACAGATA CAAAAATGCG 60  
 TGTATCTGAA TTTTAAAAAT CAAAAGGACA TGATGTCATT GACGTAGGAA CATACGATTT 120  
 30 CACAAGAACA CATTATCCAA TTTTGGTAA AAAAGTTGGC GAACAAGTTG TTAGCGGTAA 180  
 TGCAGACTTA GGTGTTTGTA TTTGTGGAAC AGGTGTTGGT ATTAACAATG CTGTAAATAA 240  
 AGTACCGGCG TTCGTCAGC ACTAGTACGT GATATGACAT CAGCGTTATA CGTAAAAGAG 300  
 35 GAATTAAATG CGAACGTTAT TGGCTTCGGT GGACGTATTA TAGGTGAGTT ATTAATGTGC 360  
 GATATTATCG ATGCCATTAT TAATGCTGGA TTATAAACCC 400

40 (2) INFORMATION FOR SEQ ID NO: 918:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1220 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 918:

50 GTCTCCAGCC ATTWACCAC ACATACCTGT CCATTACCT TCTTTATGTG ACGCTTCAAT 60  
 AACTTGTTTA ACTAAACGTA AGATTGAAGG GTTATATGGT TGGTATAGAT ATGATACACG 120  
 CTCTGACATA CGGTCAGCAG CTAATGTGTA TTGAATTAAA TCATTTGTAC CGATACTGAA 180  
 55

GATTCCTAAT TCTATATCAT CCGAAATGTC ATGACCTTCA TTTTAAAGGT TTTCTTTTTC 300  
 TTCTAATAAT ATAGCTTTAG CTTCTCTAAA TTCGTAAATT GTTGCAACCA TTGGGAACAT 360  
 5 GATATTTAAC TTACCATAAA CTGATGCACG TAATAATGCA CGTAGCTGTG GTCTGAAAAT 420  
 ATCTTGTTGC GCAAGGCATA AACGAATCGC ACGGTAACCT AAGAATGGAT TCATTTCTTC 480  
 10 AGGCAAGTTT AAGTATGATA ATTCTTTATC TCCACCTATA TCTAAAGTAC GTACAACAAC 540  
 ACGTTTACCG CCCATTGCTT CTAATACTTC TTTATAAGCT TCAAATTGTT CTTCTTCTGT 600  
 AGGCATTGG TCACGACCCA TATATAAAAA CTCAGTTCTA TATAAGCCGA TACCTTGTGC 660  
 15 ACCATTTTCa ATAACACCTG GCAAATCATT AGGTGTACCA ATATTTGCAG CAAGCTCTGC 720  
 GTGAACACCA TCAACTGTAA CAGTATCAGC ATCACGTAGw TTTTGTAATT CTTCTTGTG 780  
 AGCAAATAA CGCTCACGTT TATCTTGATA AGCGATTAAC TCATCTTCAG TTGGATTAAC 840  
 20 GATTACATCA CCATTTAATC CATCTACGAT AATCATGTCG CCTTGTTTAA CTTCTTGAGT 900  
 AATTGATTTT GTACCAACAA TTGCTGGaAT TTCTAAAGAA CGACTCATAA TTGCAGAGTG 960  
 aCTTGTTCTT CCGCCAATGT TTGTAGCAAA ACCTGTACG AATTCTTTAT TTAATTGAGC 1020  
 25 AGTATCAGAT GCGGTTAAGT CATTCCCTAC AATAACAACG CTTTCATCAA TCATACTCGG 1080  
 ATTCGGTAAT TCTACACCTA AAATATGTGA TAACACACGT TTAGAAACGT CGCGAATATC 1140  
 30 AGCCGCACGT TCTTTCATGT ATTCGTTATC CATAGATTCA AAAATTGTAA CAAATTGTGT 1200  
 TGTnACATCC GCTTAATGTG 1220

(2) INFORMATION FOR SEQ ID NO: 919:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 315 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 919:

45 TTAGATTGAC TGCAAATGCC GACTCAAAAG AACAAAGCACA ATCATTGATT CAACCTGTTA 60  
 AACAAAGAAAT TCTTGATCGT ATTGGAGAAT ATTATTATGG TTCAGATGAC ACATTAATTG 120  
 AGCAAGCTGT AATAAAGAAA ATTCATGAAC CTTTGTAAAT ATATGATGGT ATTACTAATG 180  
 50 GTGCTTTATA TCATCGATTG AAAGAAGTGG ATTTAAACGA TGTCTAAAG GGTATGATTA 240  
 ATCACAATGA AAACCTTGTT GATATTAATa AACCTATTGA GCaGCAATTA AAAGATGCAG 300  
 TGCAATTTGT TAATA 315  
 55

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 433 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 920:

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ACTTGTGTAAG CCTACAAATG TAATGAATAA TCCTATACCT GCTGAAACAG CCATCTTCAT      60
TTGATAAGGA ATTGCATTAA TAATAACTTC CCTAAACCCT GTGACGGTTA ATATCGCAAA      120
GAATATACCT GAGAATAAAA CGCCTGTGTA ACCAACTTGC CAAGGAATAC CCATGGTTAA      180
CACAAACAGTA AATGCAAAGA ATGCATTTAA TCCCATACCT GGTGcTAACG CAATTGGATA      240
TTTAGCTATT AGCCCCATGA ATAGCGAGCC TACAAATGCT GCTAATGCAG TCGCTACAAA      300
AATGGCACCT TGGTCCATTT TCATATCTTC TGATACGCCT TTAACACCTG CTAAACTTAA      360
AACTTGCGGG TTAAGTCTA AAATATAGGC CATAGATAAG AAAGTTGTGA TACCGCCTAA      420
GATTTCTCTT TTA                                     433

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(2) INFORMATION FOR SEQ ID NO: 921:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 439 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 921:

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CTATTTTATT TGTATAGCGC TTGATGTAAA GTTATTTTAG CTGTCATACT ATGTGCTAAA      60
CCAAATTGAG TTGTGTCATA TCTTCGCTTT TTTGTCACTG TTATAATAGG TATAATCGGA      120
TATAATGAAA AGGkGAGGGA GGATTCAAAA TCGTAGGTT ATTATATTCA TTTCTTTTTT      180
ATATGATCAT AGGTTTATTT AGTGGCTTTT TCTATAGAGA GCTAACAAAA GCATATGATT      240
TTACTGGTAC AACACAATTA TCACTTGTA ACACACATAC ACTTATTTTA GGTATGTTTA      300
TGkkTTTAAT ATTATTACCA TTGGaGAmGT TATTAAATT ATCAAGTTAC TACTTATTTA      360
ACTGGtCTTC TATGTATATA ACATAGGTGT TATCGTTACT ATAGGTATGA TGGTGACAAA      420
AGGATTCTTC CAAGTCACT                                     439

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(2) INFORMATION FOR SEQ ID NO: 922:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 474 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 922:

|    |                                                                   |     |
|----|-------------------------------------------------------------------|-----|
|    | GTAATATCTA TATACGTATA TTAAATGAT ATATCTGGGT ATTTCTTTT TAATAGCGGC   | 60  |
| 10 | TGTAGCCAGT CATAAATATC TtTCGaTGTT GGCGCATTAA CGCAACTTGC ACATATAACA | 120 |
|    | TCTGCCCCAT AAACACCAC ACTCACGTGC TCCATATATT TATCCCCCAT TGGTTTGATA  | 180 |
|    | GATTTTTATT ACACATCTA TTATAATATA sTmATAAAGA TTATCAAATT CATCTCTCGA  | 240 |
| 15 | AAGGAGACTT GCCTGATGCC TACTGAAGAT ACAACGATGT TTGATCAAGT AGCAGAAGTT | 300 |
|    | ATTGAACGTC TTCGTCCATT TTTATTACGT GATGGTGGCG ACTGmTCATT GATTGACGTG | 360 |
|    | GAAGACGGTA TTGTAAATTA CAATTACATG GTGCATGGTG GnACATGCCC CAAGTTCTAC | 420 |
| 20 | AATCACTCTT AAAAGCTGGG TATTGAGCCG TGCATTACAC GAAGAAGTGC CTGG       | 474 |

(2) INFORMATION FOR SEQ ID NO: 923:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 554 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 923:

|    |                                                                   |     |
|----|-------------------------------------------------------------------|-----|
|    | TCAACTTGTG AAGAAAATTT ATTAACTTTA GTAACCTTC CAACAAAACC TTGTGATGTC  | 60  |
| 35 | ATCACAGCCA TATTTGAAGT TATACCTGAT TTAGATCCCT TATCAATTAC AATTGTATTC | 120 |
|    | ATCCACTGAT CCGGATTTCT TGCCAAAACC GTAGTAGAAA TAGGATCAAA TTTTGAAATA | 180 |
|    | TCTTTTAAAT CAAGCTCTTT TTTTAATTTT TCATTTTCCG CTTCTAATTG TTGGTTCTTA | 240 |
| 40 | GATTCTAACT GGCTAATCTT ATTTTtagAT TCTTTAGAAT CTCCTTTTTT AAAAAAGTCC | 300 |
|    | CCAATCGTAC CAGCAACAAA ATTAACGGGA TAACTCACAA CTCGTTGTCC AAAAGACACA | 360 |
| 45 | GAATCACCTA TATATTGTTT AGGAGGTGAT TGAGATTGTG AACGTATGGA CAGCCCAATT | 420 |
|    | AATGCAATAA AAACGATAAT TGCACATAAA ACAACAATTA ATTTGGTATT TTTAAAAAAC | 480 |
|    | TTAAGCACCC AGAACACCTC TATTATGTCA nAATATTGTA TATCCTTTTC TAATTnATAT | 540 |
| 50 | TACTCCCATT ATGA                                                   | 554 |

(2) INFORMATION FOR SEQ ID NO: 924:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 575 base pairs

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(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 924:

|    |                                                                   |     |
|----|-------------------------------------------------------------------|-----|
|    | ATCTTTAGGC ATTAAGCAAG TTTATGTAGA AGACTTTGAA CATAAATCCT TTAGCAAAGC | 60  |
| 10 | TAAAAAAGCC TTAGAAGAAA AAGGGTTTAA AGTTGAAAGT AAGGAAGAGT ATAGTGACnA | 120 |
|    | TATTGATGAG GGTGATGTGA TTTCTCAATC TCCTAAAGGA AAATCAGTAG ATGAGGGGTC | 180 |
|    | AACGATTTCA TTTGTTGTTT CTAAAGGTAA AAAAAGTGAC TCATCAGATG TCAAAACGAC | 240 |
| 15 | AACTGAATCG GTAGATGTAC CATACTCTGG TAAAAATGAT AAGTCACAAA AAGTTAAAGT | 300 |
|    | TTATATTAAA GATAAGATA ATGACGGTTC AACTGAAAAA GGTAGTTTCG ATATTACTAG  | 360 |
|    | TGATCAACGT ATAGACATTC CTTTAAGAAT TGAAAAAGGA AAAACAGCAA GTTATATTGT | 420 |
| 20 | TAAAGTTGAC GGTAAACTG TAGCTGAAAA AGAAGTCAGC TATGATGATG TATAAATATA  | 480 |
|    | ATTGAAGTAA ATGTACCGAG GTTCTATTTT GGAAGTCTCG GTATTTTAT GTTGGAGATT  | 540 |
| 25 | GCGGTAGTTT TAAAATGCnT CnTGTCnTCA TATAC                            | 575 |

(2) INFORMATION FOR SEQ ID NO: 925:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 307 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 925:

|    |                                                                   |     |
|----|-------------------------------------------------------------------|-----|
|    | AAAAACGCTG CTGAGTTTAA AAAGCAACAA TTAAATGAAC AAGGTATTTT CAAGAAACCA | 60  |
|    | GTGATTACAC CTATTAAACC ATATAAAAT TTCTATCCAG CTGAAGACTA CCATCAAGAT  | 120 |
| 40 | TATnACAAAA AGAACCCCGG TACATTATTA CCAATATCAC CGTGGGTCAG GTAGAAAAnc | 180 |
|    | GTTTATAGAT CnCATTTGGG GGATCCAAAG CTTAAAAAGA TAAAAGTGAC TACCAGATAT | 240 |
| 45 | AGATATATTG TTACACAAGA AACGGCACTG GACCACCATT TATGAATGAT ATTGGACCAT | 300 |
|    | TTGCTAA                                                           | 307 |

(2) INFORMATION FOR SEQ ID NO: 926:

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(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 926:

5 CTCTACGCAC TCATTGAGAT ACACACATTG CGCATTGCTC ATAGAATCAG GTGTACACAT 60  
TAAAGAAATA CAAGAAcGAT TACGGCATAA AGATATCAAT ACCACTATGA ATATCTATGC 120  
TAAAATCACA AATTCATACA AAAAAGACGC CTCCCATAAG TTTAGTCACC AAATGGAAGA 180  
10 CGTCTCGTAA TTAAATATA TTTGCGTGCA TTCTAATTTA TACTTAGAAT GAATCATACT 240  
CGTGCATAAT GTAATTTTCT AGTTAGTCAA AACTATAAAC AGTTTACAT CATTCCTGGC 300  
ATGCCACCCA TGTTAGGTTG GTCATTATTT TTTTCTGGAA TTGATGCTAC AACCGCTTCA 360  
15 GTCGTTAAGG ACATTGCTGC AACACTTGCA GCAGTTGnAA 400

(2) INFORMATION FOR SEQ ID NO: 927:

(i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 809 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 927:

TTTAGGTGGT TTTAATnGTT ATGGTCATTC TGGACACCTA CTTATAATAA AATTTCAAAT 60  
30 CAAACTGAAC nTTTTGTACC GTTTGATTAA ACTCAAATTT ATTAGCTCCG TATTTAAATT 120  
TTGGTTGGGC TATATTCGTT TCGGTACTTA TTTCAACACC GTTTTATAA ACTCGGAAGC 180  
TATCATAAAC AATTcTGTCT CCAGCTTTTA GTTTGATCCC TTCGATTTTC ATTATTTTCA 240  
35 CATGCGTTAA ATTCCATACA AACGATTCTG TATCTTCGCC TAAAATAATT GTTATCTTTT 300  
TATACATGTT GAATTGGTCG TTAGGAGCAC TACCATGATA GTAAACTGTA CCTTTGCTCA 360  
AATTTTCAAA TGTATACTTT CTTTGTCTC CGCCTGCATG CCAATCAATA TTAAATCAA 420  
40 ACGACCACAA TCCAACCTTT TTGTTTCTT CTAACCTAG GCTTGTCCA ATACTTTCAC 480  
CGTATGGTAA TTCTGTAGTT TCGAATTTTA GTTCAAAGA AACTTTATTA CCTTTTGT 540  
TAGGGTTTAT AACTCCGTTA AAAATAACTT TATACTGTTT ACCATTTACA TAAATTTGTT 600  
45 GATCGTGTCT TGAATATTCG TAATCCGGGA AGTTGTTTTT ATCTAATTC ACGTAATCAT 660  
CAGAAGTTGG TTGAGTAAAC CTGTAATTCA ACTCTCTTT TCTTCTGATn TCTCGCAAAT 720  
50 ACATAGGTTT TATGTCTGTC GTTAACGAAT ACAACATATC TCGCATATAA GCAATGTCTG 780  
AACGATTTTT AACTTTACAA AAACAAGGA 809

(2) INFORMATION FOR SEQ ID NO: 928:

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(A) LENGTH: 1016 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 928:

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10  nAAAACTATT ATCGCATCTA CaGTaATCGC TGCAGGTCTT TTAActCAAA CTAATGATGC      60
    TAAAGCTTTC TTTAGTTATG AATGGAAAGG TTTAGAAATC GCAAAAAATT TAGCAGATCA      120
    AGCTAAAAAG GACGATGAAC GTATTGATAA GTTAATGAAA GAGTCTGATA AAAATCTAAC      180
15  TCCTTACAAA GCTGAAACTG TTAATGATCT GTACCTTATT GTTAAAAAAT TAAGcCAAGG      240
    TGATGTGAAG AAAGCAGTTG TCAGAATTAA AGATGGTGGT CCTAGAGATT ACTATACTTT      300
    TGACTTAACT CGTCCTTTAG AAGAGAACAG AAAAAATATT AAAGTTGTTA AAAACGGTGA      360
20  AATCGACTCG ATTACTTGGT ATTAAAAAAC ATACTGAATT AAATAGTTGT ACGCCAAACG      420
    TTAGAAAACA ATGCTAACGT ATTGGCGTGC TTTTATTATT TAAGTAACTT CCAATTTATT      480
    TAGCATCTTT ACGACTGTTT AATAAAGCAC GTATGATTAA CACGTTGCC ACTATATCCG      540
25  TTACAATTTT TATGATTGTT AATACATTCG ATTTCCTTTT CACAATAGCC ACCTCGCTTG      600
    TTCAAAACAT AAACAACAT TGCATTCACT TTTAAGTAAT TATTTATATT ATTTATCCCA      660
    ATAAGCTCAC CATTCAAATA AACACAATAT TATAAAATAA TTATACCTTT GGATATAGCA      720
30  AAAAGCCACA CTCTATAGCA TGGCTTCTAT CAATTATTTT AAAGTATTAT ATTTTAAAC      780
    TAGATCGATT TGTCTTTGTA ATTTTTTCTT TTCATAACTG TGTTGGAAAT GAATTAAATT      840
35  AACAGCTCTT TGTGCTTTAC GGTGTGTTGC AACAGTTCTT GTACGTTTGA AAAAGTTTAC      900
    AGCTTTTTGT GCATCCACAA CTTTTtAttT TACTTGwTTT kTAAAGTTTG TTGATACTGA      960
    TCATATTTTT TAGCAGCTTC ACCGTTnTTA GTTGTGCATG AGATCACCGG CAACCG      1016

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(2) INFORMATION FOR SEQ ID NO: 929:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 929:

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    AAATGAAATC ATACCTAAAA GAGATATTAT TACAGAATCA ATGATTGTG ACTGTATTCA      60
    AAATGCAGGT ATTGATTTAG AAGTATTTAA AGACGACTTA CAAAAAGTA AACTAACCGA      120

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55



CGTTTTCTTT AGTGAAGATG TTCATGAAGA AGGTTTAAAA GTCGAAGGAT TATACCCATA 240  
 TCACATCTAT ACTTATATAA TTAATGAATT GATGGGTAAA CCTATCGAAA AGAATCTTCC 300  
 5 TCCTAAATTA GAAACTTATA TACAGCAACA ACAACTTGTA ACGATGGAAG AATTACTTAC 360  
 TATTTATGAA TGGCCAGAAA AACTTTTAAA CAAAGAGTTA 400

(2) INFORMATION FOR SEQ ID NO: 930:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 930:

20 TATTTCTGAC ATGTATCATG CTCCTTCGTG CTTTATTCTA ATGTAATATA CACAATTATA 60  
 CATTGAAATT CAAATTTGTG AACACATTGT GAACTGACAT AAATTATACA CAATTTTCATA 120  
 GCGCATAATG TTTTAAAAAT ACACATTATA GCAATTATAA TTAAGTTCAT TGTGTTGTCA 180  
 25 TCAAAAAAAG AAAAAGGTGA TGTTTTAAAT GGATACAGTT GAATCAGTCG GTTTTTGACA 240  
 GCATGACTTA GCAGTTCATA TCATTTTGCA ACGATGGTGT GGTATGCTTA ATGTCGCAAT 300  
 TCAGATTTTA GGATCGCAAA ATGACTCATA TATAGCATGC CAAGTGGCAA GTATCATACG 360  
 30 ACATGGnGTG TCAGGCATAn GGCTCATACT GTGCAATATG 400

(2) INFORMATION FOR SEQ ID NO: 931:

- (i) SEQUENCE CHARACTERISTICS:  
 35 (A) LENGTH: 543 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 931:

CCAATCAATG TTGCCAATGG ATCACCTAAT GACAACCAAG TAATTGCTAC CATAGTAACT 60  
 45 GCTGTTTTAA TTTTACCTAA TTGACCAGCT GCACTTACGA ATCCTTGTTT AATTTGTAGT 120  
 AAACGTAAAC CAGTTACGGC AAATTcTCTG GCAATaATAA TGATTGCTAC TACAGAATTT 180  
 GTTAGTCCTA GTTGACAAG TACAATTAAA GCACITGCAA CTAATAATTT ATCCGCTAAT 240  
 50 GGATCCAAAA ATTTCCCAT ATTTGTAACT AAATTCCATT TTCTAGCTAA ATAACCATCA 300  
 ACAAATCGC TAAGGGAAGC CAATATAAAA ATAAACCAC TGATTAATAA CTCAATTCIT 360

ATAAAACTG GTATTAACAC TACTCTAAAA ACCGTAATCT GGTTCGGAAT ATTCATTATA 480  
 CATCCTCATT TCTCACTAAT TTATTTCTGT TAAAAATATT AAAACTAACC ATGATCCATA 540  
 5 ACC 543

(2) INFORMATION FOR SEQ ID NO: 932:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 932:

GATTGCGAAT GAGATTAGTG GGATGATACC GGTAAGTGG GAGCAAGTAT TTACAATAGC 60  
 20 TTATGTAACCT GATCAAGCTG GAGAAGTCAT CTTTAATTAT ACTAAACCAG ATAGTGATGA 120  
 ATTAAATTAT TATTCAGmCA TACCTAAAGA TTGCAATGTC TCAAAAGATA TTTTAAAGAA 180  
 TTCATGGTTT AAAGTTTATC GAATGTTTGA TGAGTTAAGA GAAACTTTTA AAGAAGAAGG 240  
 25 GCTTGAACCA TGGACATCAT GCGAATTTGA CTTTACAAGA GATGGCAAAT TGAATGTATC 300  
 TTTTGATTAT ATAGATTGGA TAAATACAGA GTTTGATCAA TTGGGCCGTC AAAATTATTA 360  
 TATGTACAAA AAATTTGGGG TTATACCAGA AATGGAATAT 400

30 (2) INFORMATION FOR SEQ ID NO: 933:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 759 base pairs  
 35 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 933:

ATTTTTACAA AGAAATAGTA GTCTTATATA TCTTAACATT TAATAACTAA ATCAAACATA 60  
 TTTTGAGCCT TTTTITGAAA ATTAACATTT TAACCTTTT GATTTTACAA CAAATTATAG 120  
 45 CTACGTATTG AAAATTAAAG CmTTGGtTTA AGTGTGTGT TAAAgyTTT TATGTTTAGA 180  
 TTGTTATATT ACTATGTATT CTTAAATTTG TTAAAAAAT TAATGCTTTA AATTGATGTA 240  
 TAATGGGAAT AAGAAATAAA TAAAAACGAC CCGCACGATT AACGTACGGG TCCACTACTA 300  
 50 AAGGGAGTCA AATTTTTACC TcGTTTGTAT CATGCAGCGT TTTACACATA CTTTAAAGAG 360  
 ATGTTTATTC GTTATCGAAG GTACACCTTT ATTATACTT ATATCATTTT TATTAAAATA 420

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ATAATGATTA TTAAATAGTA ACTAAATACA AAATTACATG GGGTGAATGA TAATGAAACA 540  
 ATACTTAATT ACTGGTGGGA CTGGTATGGT TGGATCTCAA TTAGTTAATG AAATTAAAAA 600  
 5 ATCAGATTCA CATATCACGA TATTAACGCG ACACGACCAA ATTTCAAATG ATAAGAAAAT 660  
 TTCATATGTC AACTGGGCTA AATCTGGGTG GGAACACAAA GTTCCTCAAA ATATCGATGT 720  
 GGTCAATCAAC TTAGCAGGTG CTACATTGAA TAAACGATG 759  
 10

(2) INFORMATION FOR SEQ ID NO: 934:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 934:

GATCAAGCTG GGAAGTCAT TTTTAATTAT ACTAAACCAG GTAGTGATGA ATTAAATTAT 60  
 TATTCAGACA TACCTAAAGA TTGCAATGTC TCAAAAGATA TTTTAAAGAA TTCATGGTTT 120  
 25 AAAGTTTATC GAATGTTTGA TGAGTTAAGA GAAACTTTTA AAGAAGAAGA GCTTGAACCA 180  
 TGGACATCAT GCGAATTTGA CTTTACAAGA GATGGCAAAT TGAATGTATC TTTTGATTAT 240  
 ATTGATTGGG TGAATTCAGA ATTTGGACCA ATGGGAAGAG ACCATTATTA TATGTATAAA 300  
 30 AAATTTGGnA TTTGGCCTGA AAAAGAATAT GCCATAAATT GGGTTGnAAA AATAAAGnTT 360  
 ATGTTAAGAG CAAGnTTGAG CTGAACTATA GGGGAGATAA 400

(2) INFORMATION FOR SEQ ID NO: 935:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 345 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 935:

CTGAATATAA TTTTnCAAC TACATCTCGT TTATTAGACA CCGTGCACCTG ACTAAGAAAA 60  
 TTTCTCTTGA CTCCATTAGT CCTGACGAAT ACTAACATTT AACTACCTTG CTCATCGATA 120  
 GAAACAACCTT GTAATGTAA TTTCCCTTAT TTTCTTAGTT TTAATCTATC AGCGATTAAT 180  
 50 TCGATTGCAT CTTTTTCATA AGCAATTGGA TAACTTGAC CGCGGTACAC CTAACGCTCG 240  
 AAATATGATT TnTATCGTC ATAATCTAAA ATATTATnGG CAAAATCACA GCAGTTTTCA 300

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## (2) INFORMATION FOR SEQ ID NO: 936:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 619 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 936:

```

GTTATCATCA TCTTCTGAAG TATCATCTTG CCCATCGACT TGACTTGCAT CAGTTCTCTT      60
TAAATCATCA AACTCTGGAC TAGCTAATGT ATTATATAGT GTTTTAGGTA AGTAATAATA      120
TTCGTTTAGC ATATCTTCTT TTAAAATATC ATCTACTTGA TACATAATTC TTTGAGCCAG      180
ATACATATTA TCTTCAGAAAT TTTGATTTTG GAAAAAATTA GGTAAATATA AGAACATATT      240
TACTAAAATA TCATCTAAAT CTGAATGTAT AGATGGTATA TCAAAGAAAT CTTGGCTTAA      300
AAATGCATGT TCTAAATACA AAAATAATAA ATCTGTATAT TGTGTTTTAG TACGATACAC      360
TTTAATTTGA GATTCCGTAT ATGATATACG TGTATCTAAG CGAAGATCAA TTAATTTAGC      420
AGTACTTGGG CGCTCAACTT TAATAGAAIT TAATACGCGC ATATCTTCTA ATAATTTAAA      480
AAGTGTGTGG ATAAAATTTA GGGtGTTTAA AAGTTTTATC TTGtACTACT TCATTTACAA      540
TTTGtACATC CaTCATATGA TAACCGTAAG CAGCTAACAT AACATCTGTT TTAAACCAG      600
CCATTTGAT ATGGCTTGG                                     619

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## (2) INFORMATION FOR SEQ ID NO: 937:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 615 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 937:

```

TAATCCCTTT CATAATGGGC ATCAATATCA TATTAATCAA TCTAAAAAAC TTACAAATGC      60
TGACGTTACT ATTGCAATAA TGAGTGGTAA CTTTGTCTAG CGTGGCGAAC CAGCAATCTA      120
TAATAAGTTT ACTCGTGCAA AAATGGCATT ATCAACAGCT GATTAGTTA TCGAACTACC      180
AGCAACTGCC AGTTTATCAT CTGGcGATCA TTTTGCCGAA CTAGCAGTTA AAGTCGcNGA      240
TTATATGAGT GTCGATACAA TTGCATTTGG TAGTGAAAAT AATGAtATCA AAACATTAAA      300
rCmATTAgCA CACAGCATTa ATGaAATTGA mCAATCTGaA TCCTTTTCAC aAAAAGTrAA      360

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AAGTCCTAAC AACATACTTG GTATTAGTTA CCTGAAAGCA ATTGCTAAAA ATGCTAAAAA 480  
 CATCAATGCA ATTTCTATCA AACGAGAAAA TGCTCAACAT CATGATTCAT TAATTCAACA 540  
 5 CCATCAGTTT GCAAGTGGTA CATCTATTAG AACATCAATC ATTAGTCAAG ATGATCATTG 600  
 GCATCATGTG GTACC 615

(2) INFORMATION FOR SEQ ID NO: 938:

10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 938:

20 AGAATTGAAG ATGGTAAAGT TTCAAAATAT CATTCGGTTA TCATAAAAGA CGCACAAGCA 60  
 ACTTCACCAT ATTCAATTTT TATCAGAGGT GCTATTTATC GCTTTGAACC ATTAGTATAA 120  
 ATATACGTAA GTGCTATGAG CGAGAATGCC CATATGAATA ATGACAAGCA CAATGGAAAG 180  
 25 AATCGTAATA TATTATTTAA TCGTGATGCT TAATTAAAAT GAAAAAGATT GATAATATAA 240  
 ATGTGAAAAA GTAAGTATAC CCGTAAACTA AAGTATTCAC GGTGAGAGGT GTCATGTCA 300  
 TAATGATGCA CGTGTCATAA TTATAATAGC TTAAATATGT CCATACAACA CCATGTAGAT 360  
 30 ATGCATATAC AGGGTATGAT AGACATAGnG TCTGnGAAAT 400

(2) INFORMATION FOR SEQ ID NO: 939:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 466 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 939:

GTACAGGTAT GATTGGTGAT CCCATCAGGT AAATCAGAAG AACGTGTGCT ACAAACAGAA 60  
 45 GAACAAGTAG ATAAAAATAT CGAAGGTATT AGTAAGCAAA TGCACAATAT TTTTGAATTT 120  
 GGAACAGACC ATGGTGCACT GCTTGTTAAT AATAGAGACT GGTTAGGACA AATCTCATTA 180  
 ATTAGTTTTT TACGTGACTA TGGTAAACAC GTCGGCGTTA ATTACATGTT AGGTAAAGAT 240  
 50 TCAATCCAAA GTCGTTTAGA ACATGGTATT TCATATACAG AATTCACATA CACGATTTTA 300  
 CAAGCTATTG ATCTCGGTCA TTTGAATAGA GAATTGAATT GTAAGATTCA AGTAGGTGGA 360

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GTAGATAAGC AAATGATTAA TAGTTGAGGG GTATGTCGAT GAAGCG

466

(2) INFORMATION FOR SEQ ID NO: 940:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 329 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 940:

ATGAATCACC CATTGATACC AATCATTTAC ATCACTGTCA TACGAACATA TATTTAAATA 60  
 GAAAAAAATT ATTTTAAAGA TTATACTAC TCTTAATCAT TTTAGTGAAT TAAAAAAGT 120  
 AGTGCAAAAA GCAAAATATA CTTTATACAC TACAAATCAT TTATTTATAA TAAAGTTTCA 180  
 CCAAAAAATG TTCCAATAA TGAAACCGCT TGTTCAAGCAG TATGATTATn ACTGTCAATC 240  
 AATGGATTTA CTTCAACTAA ATCCATTGAG GAAATTAAAT GTGATTGATG CAGTAATTCC 300  
 AATGCnAAAT GGCTTTCTCT ATnACTAAG 329

(2) INFORMATION FOR SEQ ID NO: 941:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 315 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 941:

CGATATAGTA CCAATTTATT TGAAGAAAAA TCCGAACTTC AAATTTCCGA TGAAGCAAGA 60  
 TATACCGGTT ATTATGATTG GACCAGGTAC TGGAATTGCT CCTTTTAGAG CATATTTACA 120  
 AGAACGTGAA GAACTTGGTA TGAAGGAAA AACATGGTTG TTCTTTGGTG ATCAACACCG 180  
 TAGTTCTGAC TTTTATATG AAGAAGAAAT AGAAGAATGG CnTGAAAATG GAAACTAACA 240  
 CGCGTAGATT AGCATTTCCA AGAGnCCAGA CACAAGATAT GACAGCCnCG ATATGGAGAA 300  
 GTAACGTTCC ATGAT 315

(2) INFORMATION FOR SEQ ID NO: 942:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 699 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 942:

TACCAATAAT CAACTTGTTT TACATCATCG TGTGTTTCAA TCAC TTCCT TTTTATACCT 60  
 5 TTCTTACCTT TAAAGAATGC ATCAACATCT TTTATTGAAG ATCCTTTTGA ATCTTTAGTA 120  
 AATCTATAAT CTGCAAGTTC CACTTTACCC ATTAATTCTT TGTAATCTTT CCATCCTTGA 180  
 ATCCCTTTAC TATTCGTAAA CGACTTTTCT GTCAATTAATG GATCCAACCT ATCAAGAGAT 240  
 10 GGCGCATCTT TAATTCCTTT CATTTTCTTC TCTATTCTT CATATTTCTC TAAATCTGGA 300  
 TCTTTCTCTT CTTCGGATTC TTTTTTACA GTTCTTGTT TTGATTCTTC TGATTCTTT 360  
 GATGATAATT TATGATTCCC ACCAAAAGAA CAACCTGCTA CGACTAAAAG CATAATTAAA 420  
 15 AGTAAACATC CCAGTGTCTT TTTCATAAAC TTTCTCTCT TAAGTTATTT TGTTTGAATC 480  
 AAATAAACAT ACATAAATTT AAAAACTTA TTTATATTGa TATTTTACAT TAACCATCAA 540  
 20 TATTTTAAA TACTTTAAwT GaTAATTTAA GAAAATTGTT TTGTCTAATA ATTTAAGTAG 600  
 TTAAACATA GATAGATATA AAATAGTTTA TAGCCATTAA TTTATAAGTT TAAAATTCGC 660  
 ACTATTTCAA TTTGCCATTT AAAAATAGTT TGTTTAATC 699

(2) INFORMATION FOR SEQ ID NO: 943:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 30 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 943:

CGCTCCATAA ATCAACAATG TTCGAGTCTG TAATCTAGAT GATAAACGC CAAGAATGAT 60  
 CATAAATGGC ACTTCTAAAc CAGCACATAA ACTAGCTAAA TAACCGACAT GTTGTTTCATT 120  
 40 TTCTTTTAAA TAATCAGTAA CAAATAAAGG CATATTCATC GTATACATCC ATTGTCCAAT 180  
 GTGTAATAAA ATAAATGCAA TAAATGGTAA TAAAAGCGTT TTGTCTTTAA ACATATTAGG 240  
 AGCAATTTTT TCAACATGTT GTTGCGTACT AATAGGGTGT TTAATGTTTA AATCCTTATA 300  
 45 GAnAAACACT TGAAGTACTA AAGTAAATAA AATGATACTT ATTGGGCCAC CAAACAATCC 360  
 AGCATAGCCT TTTAATCCGA TTAATTGGGC ACCAATAAAT 400

(2) INFORMATION FOR SEQ ID NO: 944:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 570 base pairs  
 (B) TYPE: nucleic acid  
 55 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 944:

5 AAGATGACAA TACTTTGTTT CAAGAATTGA AAAAAGAATT AGAACAATGG GATTTTAATG 60  
 TTGCTGGTAT TGAAGATTC GCCAAAGTAA TGGATACATT TGAAAGTTTT AATCCTGAAA 120  
 TTGTTATATT GGATGTTCAA TTACCTAmAT ATGATGGGTT TTATTGGTGC AGAAAAATGA 180  
 10 GAGAAGTTTC CAACGTACCA ATATTATTTT TATCATCTCG TGATAATCCA ATGGATCAAG 240  
 TGATGAGTAT GGAACCTGGC GCAGATGATT ATATGCAAAA ACCGTTCTAT ACCAATGTAT 300  
 TAATTGCTAA ATTACAAGCG ATTTATCGTC GTGTCTATGA GTTTACAGCT GAAGAAAAAC 360  
 15 GTACATTGAC TTGGCAAGAT GCTGTCGTTG ATCTATCAAA AGATAGTATA CAAAAAGGTG 420  
 ATCAGACGAT TTTCTGTCC AAAACAGAAA TGATTATATT AGAAATTCTT ATTACCAAAA 480  
 20 AAAATCAAAT CGTTTCGAGA GATACAATTA TCACTGCATT ATGGGATGAT GAAGCATTTC 540  
 TTAGTGATAA TACGTTAACA GTAAATGTGA 570

(2) INFORMATION FOR SEQ ID NO: 945:

25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1241 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 945:

CCGAGnCCAC CGTTCCAAAG TCCATTTTTA TCCCCATCCC TCTCTGAATT GAACTATAAT 60  
 35 TTTTGAATTT ATTAATAATG CTATTTTnT TATTTTATCA AAAACTGATT ACAAATACAC 120  
 ATAGAAAATG AAATATATTT TTCTTTGACT ATACATAACT GTTATTTCTT TGGATATTTA 180  
 40 TATTAAATGC ATTGGTAGTA GTTGTAGCGC ATTAATGTTT GACGGTGTAT AGTATTAATT 240  
 ATATTGAAAG TTAGTTGGAA GTTGATAGTA GGAGTGGGAG CATTGAAGCG ATTTGTGGCG 300  
 ACGGTATTAT TATTACTAGT CTTTATATCA GGATGtGGTA ATGrTaAATA TGTGAAAGAA 360  
 45 ATaGATGAAG CAGTTAAaT TCAAAATCaA AAACAAGAAC ACTTGCCCAA AAAAGGCAAC 420  
 GGTGATCGTG TTGATCATTT TGAACGCAAA GATGCTAATA TTTATGTCTA TGATAAGGAT 480  
 AAAATTATCA TTTTAGCTTA TAAACCTTTG AGTAATGATG ATGAAGTGCA TTATTATGCA 540  
 50 TATGATTTTA GTGATAAACG TGTATCATAT AAGCAAGATT TTGATTCGAG ACGATATTAT 600  
 CAACAACATG ATGCGGATTA TCATGAAGAA AATATGACGA ACTAGATATG AATAGGAGTT 660

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GGTAAAAAAG AATCAGCAAC GACATCTTCG AAAAACGGCA AACCATTAGT TGTCGTATAT 780  
 GGCGACTATA AATGTCCTTA TTGTAAAGAA TTAGATGAAA AAGTCATGCC AAAGTTGCGT 840  
 5 AAAAATTATA TAGATAATCA CAAAGTGGAA TACCAATTTG TCAATTTAGC TTTCTTAGGT 900  
 AAAGACTCAA TTGTTGGTTC GCGTGCAGT CATGCAGTAT TGATGTATGC ACCTAAATCA 960  
 TTTTtagatt TTCAAAAGCA ATTATTTGCT GCCCAGCAAG ATGAAAATAA AGAATGGTTA 1020  
 10 ACAAAGAAC TATTAGATAA ACATATTAAA CAACTGCATT TAGATAAAGA GACGGAAGAT 1080  
 AAAATTATAA AAGATTACAA GACAAAAGAT AGCAAGTCTT GGAAAGCTGC AGAGAAAGAT 1140  
 AAAAAATAG CGAAAGATAA TCATATAAAa aCGACACCAA CTGCATTAT TAATGGCGAG 1200  
 15 AAAGTTGAGA TCCATATGAT TATGAAAGTT ATGAGAAGTT A 1241

(2) INFORMATION FOR SEQ ID NO: 946:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1057 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 946:

TAATACAATG ACACCATTTA GCATGACCGT TATCCCTGTA ATTCAGCTGA TATTATCTGT 60  
 30 TGCAATTTTA TGTGACGAAC TGTGCACTT AATTGATAA ATCAACAAAT ACAAAAAATC 120  
 TAAGTTGAAC AATTATGATA CAACCGTGCA AACGATATGT AGTATAACTT GTCAACTTAG 180  
 ACTTATTGAT AAATATATTA ATAGTGGTTT ACCATAGCAG GAGATTTCAC aTcAAAATTT 240  
 35 TGAAGTAGCG TATCaATCTT TGaATCaTcA ATATATACct TATGTAAATT TTTCaTATAC 300  
 ATCGAATGAG AAAGTGCTTC aTAATTTAAT GAAAAAGATA TATGATCTCC AACTTGATAG 360  
 40 TGTCCTTGAC CATTTAAATC AAGCATTAAT TGATCACTCG AAGCGCCTAA AATATTGATA 420  
 TGCTGATCCA TAGGTGAAAT ATTATCGACT TTTGTayCTA AATAACCAAT ATCTACAATA 480  
 GCTTGTAAAG ATGATTCATG CGTTTGTGTA TTAACGAG GTTTAATTTC TAAAACTCA 540  
 45 GCCTCCAATG TAATCGCATC TTGATATAAC ATAGCGATCG CTGATTTGT CGTTGTATCA 600  
 ACACCTCTAA ACAACGTTTC ACCTATTCGC AATTCATTTA TTTTACCCAA ATCATTATAT 660  
 AAAAGTTGTG GTAACATGCT CGAATTACCA CCTGAATAA TTTTCAATCG ATATCCTATT 720  
 50 TCTCTTTCAA CAGCTGAGAC GAATCGATTA ATCATAAAGA TATCATCATC ACTTGGCGCA 780  
 TCAGATTAA AACACATAAA ATTGAATGCT AAACCTACAA AATGGATATT TTTCAAGTGA 840

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CAATCTACCA TTAATAAAAT CTTATGTTTT TTTCTAAAA CTTCTGgCTA CTCATTTAT 960  
 TTGATGTATG GGTAGATAAT TCCGGTTTGG GATACCTCCA TATCnAACCT TTTTTCCTAA 1020  
 5 TCAATATCCT GGAAAAhCCC TTTTTTTGGG CAGGGCG 1057

(2) INFORMATION FOR SEQ ID NO: 947:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 649 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 947:

GATATCCGCT CGATGAATAT ACCTTTAAAG GTGTTGGTGC AAATTCTGAA CAATTAAGTG 60  
 20 CTATGAATCA TGATTCTTTA AAAAAGGAGT ACATTTCAAA TGA CTGTAA ATATAATCAA 120  
 AATGGCGAAT TAACAATGGA TGGTATTAGT TTA AAAACGA TTGCACAAAG CTTTGGTACA 180  
 CCTACCATTG TTTATGATGA ACTACAAATT aGAGAACAGA TCGCCCGTTA CCATCGCGCA 240  
 25 TTTAAAGATA GTGGATTAAA ATACAATATT TCATACGCCT CAAAGGCATT TACTTGCATT 300  
 CAAATGGTCA AACTTGTAGC TGAGGAAGAT TTACAGTTAG ATGTTGTTTC TGAAGGTGAA 360  
 TTATATACAG CTTTAGAAGC AGGTTTTGAA CCGAGTCGCA TCCATTTCCA TGGTAACAAT 420  
 30 AAAACGAAAC ATGAAATTAG GTATGCTTTA GAArATAATA TCGGTTATTT TGTATAGAT 480  
 TCATTAGAAG AAATTGAATT rATAGACCGC TATGCTrATG ATACGGTTCA AGTTGTATtA 540  
 CcGAGTTAAT CCcAGGTGgT TGrAAGCcAC mTrCaCaCgA aTTTATTCaA ACyGGGcaaG 600  
 35 AAgGATAGGT TAAAGTTTTG GGATTAAhCC nnTTTCCCAT TAATGGGCC 649

(2) INFORMATION FOR SEQ ID NO: 948:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 948:

TACAAAGCTT AAAACAGAG CTTAGTyTCG TTGAACCATT AATTAGCCGC TTAGAATTAG 60  
 50 AAGAAGCTAA TGATAAACTA GCTAATATCA ATGATAAGTT AGATGACATG TATGATTTAA 120  
 TTGAACATGA AGTTAAAGCT AAAAATGATG TCGAAGAAAC AAAAGATATC aTTACGGATA 180

AAACTACTA TATAAATGAA TCTGATGCTC AGAGTGTTTCG TCAATTTGaA AATGrAATTC 300  
 aAGTTTAAT TTCTGTATAT GATGATATTT TAAAAGAnAT GTCTAAATCT GCTGTGCGAT 360  
 5 ATAGCGAGGT TCAGGATAAT TTACAATATT TAGAAGATCA TGTCACAGTT ATTAATGACC 420  
 AACAAGAAAA GCTACAAAAT CATCTGATTC AATTGCGTGA AGATGnGCAG AA 472

(2) INFORMATION FOR SEQ ID NO: 949:

- 10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 949:

20 AGAGGATCCC AGGCGTTTGT TGATCCAGCA GCCGATnCAG AATACATCTT CTATGCATAT 60  
 AAACGTTTCA ATTTGGAATT GAAAGATCCA AACTTCACTA GTGAAGAAAA TATGTTTAAA 120  
 GATGTATCAG ACAAAACCATT AATACCTGCT CGTAAAGCTC AAATTACAAA TGCGAACTAT 180  
 25 AAACGACATG GTATGAAGTT GATGATTCTT GGGAATGACG AACCATATAA CAATGAGTTC 240  
 AAGAAAGATG ATCGAAAATG CGAAGAATGA GAAATTTCAA AGGTGCGCAn GTCAAGCCAT 300  
 GTGTCAGGGG GGCATATGAT TTCnGGTCAT CAGTAAGGAC TGTGTCATGC CATGGCCATC 360  
 30 TGTGTACnG ATCTCTAATA GAATCTCAGA TGCCCGGCAA 400

(2) INFORMATION FOR SEQ ID NO: 950:

- 35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 556 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 950:

AAAATCTTCG ATGACAAAGA AATCTAATGA TGTTTCTTTA AAATGACCAA ACTGCAACGG 60  
 45 AATGATATAA CCACACTTGA GATATGGCGC TTCTTTTTC AACTTAGTCA TCACATCATA 120  
 ATCCAAAGAC ATCACACGAT ATTGATGTTT AACACCATGC TTTTTCAAAA TATCAATAAC 180  
 ACGTTGTGTA TAATCTGCTG GTTCTTTACC ATGTGGCTTT AACTCTACTA GTAGCTTCAC 240  
 50 ATTTGATTGT TTAGCCGTTT CAATAAATTC GTCTAAGGAT ACAAATTTTG CTTCATGTCC 300  
 ATTTTGACGC ATTTTCAAAC CGACGATATC TTTGAAATTA GATTGAGAAA TATTTTATT 360

CATAATTGTA TCTAACTCAA CGTATTCGAC ATTTCGCTTTT GCAGCAGCTT TCAATGACGG 480  
 AATAGAATTT TCAACACCTT TATCTTCGAA ACCACGTGGC CAATAATGGA GATATTGTAA 540  
 5 TTGATAGTAT TATTGG 556

(2) INFORMATION FOR SEQ ID NO: 951:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 469 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 951:

TTGTGGTAAT GATGTTAATC AGTATATTTT TACTTTTGAC AATGACATCT AAAGGATTAA 60  
 20 GCAATCTTAG AGTAATAGAT GATGAGGCAA ATATCATTTT TTTTATTACT GAATTGAATT 120  
 ATATTAAGTC GCAAGCTATA GCAAATCAAG GATATATCAA TGTTAGATTT TATGAAAACA 180  
 GTGACACTAT TAAAGTAATA GAGAATAATA AAATACGATT TCTAAAATTA AAAGTAGGCA 240  
 25 AAATAATTAA TGTGCAAAA GTTGATATTA TTGCCTTTGA TAAAAAGGG AATATCAATA 300  
 AATTTGGTAG CATAACAATT TACAATAACA ATTCAATTTA TAGGAATAAT ATTCCATATT 360  
 GAAAAAGGCA AGAATTCGTT ATGAAAAGCT ATAAGTGTA AGGTCATTC TTAATAGATA 420  
 30 GTATGGCTGG nTTTTTGCCA ATTGGGATTG nATTACATTA CTATTGATT 469

(2) INFORMATION FOR SEQ ID NO: 952:

(i) SEQUENCE CHARACTERISTICS:  
 35 (A) LENGTH: 730 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 952:

ACATnTATAA TnCTTATTTG CTTGCTCCTT TCACTTTTTTA AGAGTAAAAA ATAACCTGAA 60  
 45 ACATAACTTT AACATCCAAG TTTcAGGTTA GTGTAATGTA AATGATTTAC TTTGTTnTAT 120  
 TATGATTAAA CATCTAATTC TCTGCTTGTA AGTGCTTTAA TCATCTCTGG ATCAGCATGT 180  
 GAGAAAAATT GGCTATTACT TTCTTCTAAT GTCGCAATTT GTTGTTTATC TTCTTCTGTA 240  
 50 AGTTCAAAAT CAAATATATC TAAGTTTTGA GCCATACGTT CTGGATTTAC TGATTTTGCG 300  
 AGTACAACAA TGTACGTTT TACTAACCAG CGTAAAATAA CTTGTGCAAT TGATTTGTTG 360

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AATGGTGCCC AAGCTTCTAC CACAACATTT TCTTGTGAA GTGCTGCAAC TTGTTCTTCT 480  
 TGTGTGATGGA ATGGATTAAT TTCTATTTGG TTCACTTGTG GTTGAATTTG ATTGTGAATA 540  
 5 CCTAAATCTA CAATTGATC AACGCCGAAG TTAGATACAC CGATTGCTTT AAaTTTTACC 600  
 ATTTTctTTT AACTCCTCCA ATGCACGCCC ATGGAGCCAT ATACnGCCAT TGGTAAAGGT 660  
 TGGGTGGAAT nAAGCACCTA GGATCCAGGA TAGGTCCCAA ATTTTAATCC GGTGGGnAAT 720  
 10 GGATCGGTTC 730

(2) INFORMATION FOR SEQ ID NO: 953:

15 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 953:

ACAAATGACA ACGTACAATG ACGTCTTCAC AAACATGCAT TTTAGGAGAT TGATTATTAC 60  
 25 AAATATCCAG TTTTTTGTTA CATCTATTTG CAAATCTGCA CTTATTAACG TGAAATGCTT 120  
 GGATTGATGG CACAATTCCT TCTATCGTTT CAAGTCGTTT CTGCTCTTCT TTAAGTTTTG 180  
 GAATTGTTGA TAATAATTTT TGGGTATAAG GATGTTTCGG ATTGTGTAGT ATTTCTTTTA 240  
 30 TGCCTCCAAA TTCTACAATT TGACCTGCAT ACATAACTAA GACTTTATCG CAAAACCTCAG 300  
 CAACTACACT CAAATCATGT GTAATCATCA TAATTGCCAT TTGCGTTTCC TTTTGCAATT 360  
 CTTTTAATAA GTCTAATATT TGCCTTGAA TCGTGACATC 400

35

(2) INFORMATION FOR SEQ ID NO: 954:

40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 251 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 954:

TAAATCTTGA GGACGTTTGG TCTGAAAGCG ATGCTCAACT GTTGATAAAT CCAATTCGAT 60  
 AACATCTGTA TAATTAGGAT CTCTTTTCTC AACATCAAAn ACATATGGTT TTGTTTCAAA 120  
 50 TATTCTTTTA CTAGCGCGAT ATGTTCTGTCT GATCTACCAG TTAAC TTCAT ATATTTAAGA 180  
 ATTCTCATCA ACTGGGGAAG AATCCGCAAG TTGCTCCATA CTCTGGTGCC ATGTTTnCAA 240

55

## (2) INFORMATION FOR SEQ ID NO: 955:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 955:

```

AAACATTAC ACAAGTAGTA GAAGCAATTT ATGATGAAGA AGGTAACAGC TTaGamgCGG      60
CGCGCCATCC aTTACAAATC GTTCAAATTA AAGTGGATCG CCCGATATAT CCAAACAACA      120
TGATGAGAAA GGAAATTGGC TAATGAAAGC TACTACAATC ATTGGCATAG CTGGTGGATC      180
TGGCTCAGGA AAAACAACCTG TAACTAACGA AATTATGAAA AACTTAGAAG GTCATAGTGT      240
CGCTTTACTT GcTCAAGATT ACTATTATAA AGATCAAAAG CACTTGACTT TCGACGAGCG      300
CCTAGAAACC AATTATGACC ATCCATTTGC ATTCGATAAT GATTTATTAA TTGAAAATCT      360
TAAAGACTTG AAAAATGGTA AAGCAGTAGA AGTACCGACA TATGATTATG CtAGTCATAC      420
AAGAAGTGgA CATTACCATT GGATTTTtAA ACCTAAAGAT GcTTATTtAT CGTAGAAGGG      480
CCTTTTTCGC CTTTAGGAAA ATAAGGGTAT TTAC                                  514

```

## (2) INFORMATION FOR SEQ ID NO: 956:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 956:

```

ATTTTAACGA ATATCTTGCC GTACGATGCC CAAGCTGCAT CTGAAAAGGA TACTGAAATT      60
ACAAAAGAGA TATTATCTAA GCAAGATTTA TTAGACAAAG TTGACAAGGC AATTCGTCAA      120
ATTGAGCAAT TAAAACAGTT ATCGGCTTCA TCTAAAGAAC ATTATAAAGC ACAACTAAAT      180
GAAGCGAAAA CAGCATCGCA AATAGATGAA ATCATAAAAC GAGCTAATGA GTTGGATAGC      240
AAGCCATAAA GTCTCACCTG AATGACGGTC AAGTGATAG CATAATAGTC ATGCTAAGTT      300
AATGAGTCTC AATGTGTAGG GCACAAGTGC GGGCGTCTAT GCATGAATGT TGCCACGCTC      360
ACAACTGGGA AGTGTAATG TGACTGTA                                  388

```

## (2) INFORMATION FOR SEQ ID NO: 957:

(A) LENGTH: 394 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 957:

10 AACAAAGTAC ATCGCAGTTA CGAGAAGAAA TAAATGCATT GTATAATCAA GTTATAGAGG 60  
 TTGGACAAGC GTTATCAAAG CAGCGTCGTA TAGTCGCTAG GGAGTTAAGw GACCACATTG 120  
 TATCGGAAAT TCAAAACTTA CAAATGAAAG ACGCAAATCT TGAGATTTCA TTTAAAAAAT 180  
 15 TAGAAGAACC GAATATTGAT GGAATCGAAT TTGTAGAATT TTTAATCAGT CCAAATAAAG 240  
 GGGAAACCATT AAAAAGTTTA AATAAAATTG CGTCAGGTGG AGAACTTTCT AGAATTATGT 300  
 TAGCGTTAAA AAGTATTTTT GTTAAATCGa GAGGTCAAAC TGCAATTTtTr TTcGATGAGG 360  
 20 TTGaCTCAGG TGTATCtGGr caAGCTGcAC CanA 394

(2) INFORMATION FOR SEQ ID NO: 958:

25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 503 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 958:

CCGCCATTTT TTTCGATTTT TTTTCAAGT TTTTCACGGT CTTTGAAGA TAGACTATTG 60  
 35 AAATCTTTTG CACCACTATC ATCAAAATCA ATATCTGCTT TCAATTTTGT GCTAGATTTT 120  
 AAAATGAAAT TAATTGGTTC TTCAGcATAt TTGATGCCGA TATyTAACGT AGATTTCTGA 180  
 GTGTTATTyT TTACGTCAGA ATCTATATTA TTTTCAAAG TGAATTCATT TTCGTCGCTA 240  
 40 TATTTATCTA ATGCGACAGT GATTTTACCT TTATCTTGAC GTTTTGTGCC ATCTACTTTT 300  
 TCTTGTTAT CTAATTTGAT TTTTGATTCA TCATATTCTG TCTTTTACC AAATTCGTAT 360  
 TTATCATTAT ATTTATtATC TTTWTCTTTA GAAGATACGC CTTTAATTGT ATATTTGCT 420  
 45 TCAGCATACG TGTATTTATC TTGATCGAAA TCAAGTGCCT AATCTAGTTT TAACTTATCG 480  
 TCTTCTAAAG TATTAGTACC TTT 503

50 (2) INFORMATION FOR SEQ ID NO: 959:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 307 base pairs  
 (B) TYPE: nucleic acid  
 55 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 959:

TCAAACGTAC AGAGCTTGTT AAGTGTTTAG ATTATTTACG AGAGAGCGAC ACATTAGTTG 60  
 5 TCTATCAACT TGATCGGTTA GGTAGAACGA CAAAACCTATT AATTGAATTA TCACAATGAT 120  
 TCGATGATAA CGGAATTGAC TTACCA<sub>n</sub>ATT AGTAACCTGA ACATTTCCAC GAAAGACCCC 180  
 10 ATGGGGCCAA AATGTTTTTA CCGATGATGA GTGCCTTTTT CCGGGTTAGA AGTTAATTTA 240  
 CTATGTGAGT GTATAAAATA GACT<sub>n</sub>AGCAG CCACAAG<sub>n</sub>CG AGAGGCCGAA AAAAGCGGGC 300  
 GCCCTCT 307

(2) INFORMATION FOR SEQ ID NO: 960:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 400 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 960:

25 ATAAGGACAT TTATAGTCGC CATATACGAC AACTAATGGT TTGCCGTTTT TCGAAGATGT 60  
 CGTTGCTGAT TCTTTTTTAC CGCAAGCTGT TAAAATTAAC ATGCTCACTA TAAATAATGT 120  
 30 TAGTAATTTT TAGTCCATAA TTA<sub>n</sub>CTCTAA TCCTAACC<sub>n</sub> GTC<sub>n</sub>G<sub>n</sub>AAA TTTCCTCCAT 180  
 GATAATCCGC ATCATGTTGT TGATAATATC GTCTCGAATC AAAATCTTGC TTATATGATA 240  
 CACGTTTATC ACTAAAATCA TATGCATAAT AATGCACTTC ATCATCATT CTCAAAGGTT 300  
 35 TATAAGCTAA AATGATAATT TTATCCTTAT CATAGACATA AATATTAGCA TCTTTGCGTT 360  
 CAAAATGATC AACACGATCA CCGTGCCTTT TTTGGCAAGT 400

(2) INFORMATION FOR SEQ ID NO: 961:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 400 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 961:

50 ACAATTAGTT ATACCCAAAA GAGTTATGTC AGTGAAGTAG ACAAGCAAAA CTCAAAATCT 60  
 GTTAAATGGG GTGTTAAAGC AAACGAATTT GTTACGCCTG ATGGAAAAAA ATCTGCGCAT 120

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GCTCCTGATA ATCAATTGCC ACCTTTAGTT CAAAGTGGCT TTAATCCATC GTTTATCACT 240  
 ACACTATCAC ATGAAAAAGG TyCagTGATA CGAGTGaATT TGaAATTTCa TATGGTAAGA 300  
 5 ACTTAGATAT TACCTATGCG ACTTTATTCC CTAGAACTGG TATTTACGCn GGAAGGAAGC 360  
 ATAATGCATT TGGAAATAGG AACCTTGTAn TTAnGTATGG 400

(2) INFORMATION FOR SEQ ID NO: 962:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 358 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 962:

20 CTTTTACAAA GACAAATTAG CGGTAATCGG TAAngATCGT TGTTGATCCA GTTGCACTAT 60  
 TGAAAGAATT AGACGGATTA AATGAACGTG GCATTCTAC AAGTAATTTA CGTATATCTA 120  
 ATCGTGCGCA AGTGATTTTA CCATATCACT TAGCACAAGA TGAATATGAA GAACGTTTAC 180  
 25 TGGTGACAAT AAGATTGGTA CACTAAAAAA GGTATCGGTC CAGCATATGT AGCCAAGTCA 240  
 CGTATCGGTA TCGTATGCAG ATTACTTGAA AAGAACATCG AAGATATTAA ATCAACATGA 300  
 TATAACCAGC TATTCAAGGA TGTTACGAAC ATGnCACATT GATGAAnCTT GAGATATA 358

(2) INFORMATION FOR SEQ ID NO: 963:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 258 base pairs  
 35 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 963:

40 AGTGAGCAGG TTGAAGTAGT AGGGCCGATT CAAATGGAAA GAGATACACA TAAAGATGGT 60  
 AAGGTAAAGT GGCAATTGCT TTATATAATG AATCAGGATG ATGATGAAAT TAAGCCACCA 120  
 45 TTTTTTATTC AATGGGAGGA AAGTGATTCC ATTGCGTACT AAAAAATTGC AAAAATATTT 180  
 TCAAAACCAT TTCAATTGA AACTGTATTG TGAAAGTAAA ACCGTCACAA CAGTATCGAT 240  
 50 TGGTTGAAnT GGTGnAT 258

(2) INFORMATION FOR SEQ ID NO: 964:

- (i) SEQUENCE CHARACTERISTICS:  
 55 (A) LENGTH: 388 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 964:

|                                                                   |     |
|-------------------------------------------------------------------|-----|
| TTATCAAACC GCCATAGCCA CATCTCGATT CAAGGATAAA TTTGTTTTCT CATATCTTAT | 60  |
| CTCTCATGAC AGTGCACGAT ATATATCTTT TCCAAATATT CATCACTTTT TTCCTGTTAA | 120 |
| AATCATTTCT ATTATTAATG CTTTAATGAC AACTTATTTA ATTTATTGCA TTTAATGCCC | 180 |
| TGCTTCATTT TCAAATATTA ACTTTAATCG ACTAGCTCAT CACACTATTT ACCCTTTCCA | 240 |
| CCTATCACTA CTGAATTCAA AACGATTTGT TTACAAATCC CCTTATGCCA ACGGTCGAAT | 300 |
| TTCATCATGT TTACATTTAA TTGCAAATGC CCTCTTGAAA TATTTTAAAA TTAATATTAT | 360 |
| TCTTAGCATA CTAGTCGGAA TTATATTC                                    | 388 |

20

(2) INFORMATION FOR SEQ ID NO: 965:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 602 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 965:

|                                                                   |     |
|-------------------------------------------------------------------|-----|
| AAAGTGAGGT ATAGTCCGAC CATACTCTAA AAACGTAGCG AGATAAATAT ATTTCAATCC | 60  |
| TAACTTTTAT GTTTTGAGGC ACTTGCCATT TAGGATATTG TCGTTCGTAA TACGACACTT | 120 |
| GTTGTATAAA TACACCTAGT CCAAATGGCA GCATCATGAG TAAGATACTT CTTAAATAAC | 180 |
| TTAAACCAAT ATCATGCCAT ATGTGTCCAA TAATCAATTG AAAGACAATG ATAGATACTA | 240 |
| TTAAAACGAT TATATTTATT GTCACTTGTT CAAACGCACT CCTTTTCCAA ATAATAGAAT | 300 |
| TGCTGCTTGC ATGACAACCA TAAAACATAC AAACATAGCA GTTTTAAGCG TTAGACTTTC | 360 |
| TAGAATGTGa TTTAGAACAT GTAAGGGCTC ATTAAAGAAA TAAACGGaAT GTAAGCGTAA | 420 |
| GAAACGACCA ATATAAATTC CGAATCCATT TAAAAACATT AGcACGaCAA CrATTAATCT | 480 |
| ATTaAGCCAA CGGTGaGaAG TCAATGtTAG TATTTCAAAA TAGATThAAA TCATCACATA | 540 |
| AACCGCTAAG AAGACACCAA GCAGTAAATA GGTAAAGTAT TTCCACTCAC TTAAATTTAG | 600 |
| TC                                                                | 602 |

50

(2) INFORMATION FOR SEQ ID NO: 966:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 744 base pairs

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(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 966:

|    |                                                                    |     |
|----|--------------------------------------------------------------------|-----|
|    | GTCCTAAGGT AGATTTATCT ACAACTGTTG TTATTTTAnC AATTATTGGA GCGATTTTAT  | 60  |
| 10 | TAATGTTTGC TAGCATATAT TTTATnAAAA TTGTGACATC ATACTTTACT AAGAACTTT   | 120 |
|    | TAGAAATTAA ATTTAATTCG AAATAGTATT TTCAATGAAG TGCTTCAAAG CTAAACTTTC  | 180 |
|    | ATGACATTTT TTTGAAACTA GAGAAAATGG CTCATCAACT TCTAGCtGAA TGCCTTCTTG  | 240 |
| 15 | AAAATGTATT AATGTTGAAT TCTCTATGGC AGTCATACCA ACAATATAAT GTGCATTGAT  | 300 |
|    | ATAAAATTTGT ATCGGTGCAC GTTTATGTTT TAACGGAAAA AGTATAGTTT TTGGGTTGAT | 360 |
|    | GTAAATAGGA ACCAGTTTAT TAATATTTAG TATGTTTTTT GCAGTCTCAA TTAGCACACT  | 420 |
| 20 | TTGTGATGAT AAATGCAATT TCGCATAATA TGrAACGAGT TTGTTAATTG GAACTTTAAG  | 480 |
|    | AATGTAATCG CAATGTAAAA AGACACAATT TGTTCGAGA TGGTTTGAAG TAGCAGTTTG   | 540 |
|    | GATATAAAGT AGATATTTAG TAGAATTGTC TTGCAAATAT AGTACTCCTC GTTTAATAAG  | 600 |
| 25 | TTGTTAATTT AATGGTTAAA ATAAATTTAT ATGAAGATGT TAGGGTGTTT CAACATCATT  | 660 |
|    | AACACATCGA CCGAAATTTT ACAATAAACT AATTAAAATT ATGTTGGCAT TTACGCTTAA  | 720 |
| 30 | CGGACATCTT AATTAATTTA ATCG                                         | 744 |

(2) INFORMATION FOR SEQ ID NO: 967:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 503 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 967:

|    |                                                                     |     |
|----|---------------------------------------------------------------------|-----|
|    | TACTTTGCAG GAGCATTAGG TATTCTAGCA TTTATAATGT CAATTGTATT GATTACAGAT   | 60  |
| 45 | CCGAAAAAGT CTACGACAAG TGGTTTCCAA AAGTTAGAGC CACAATTGCT AACGAAAATT   | 120 |
|    | AACTGGAAAG TGTATTATTAC ACCAGTTATT TTAACACTTG TATTATCGTT TGGTTTATCT  | 180 |
|    | GCATTTGAAA CATTGTATTG ACTATACACA GCTGACAAGG TAAATTATTG ACCTAAAGAT   | 240 |
| 50 | ATTTTCGATTG CTATTACGGG TGGCGGTATA TTTGGGGCAC TTTTCCmAACT CTATTTCTTC | 300 |
|    | GATAAATTGA TGAAGTATTT CTCAGAGTTA ACaTTTATAG CyTGGkCaTT AwTATATTCA   | 360 |
| 55 | GTTGTTGTCy TAAAwAwTAWT AgTTTTtGCT AATGGACTAT TGGGTCAATA ATGGTTAATC  | 420 |

TTTTCCnAAn ATTGCnGGGG AAG

503

(2) INFORMATION FOR SEQ ID NO: 968:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 465 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 968:

TACAGGTAAA AAAGGTGGTC CGTTTATCGA TTCATTAAAC CATCGTAGTT ACACGAAAGC 60  
 ATATGTTTCA TCAGAAACCG ATATTCCATT TTATGCTGAA GCATTGGAA TTAGAGAAGA 120  
 AAATGTTGTA CCAACAGGTG TACCACGTAC TGaTGTACTA TTTGATGAAG CTTATGCAAC 180  
 ACAAATTAAA CAAGAGATGG AAGATGAATT GCCAATTATA AAAGGTAAGA AAGTTATTCT 240  
 ATTCGCACCG ACATTTAGAG GTAATGGTCA CGGTACGGCA CATTATCCAT TTTTAAAAAT 300  
 TGATTTTGAA CGTTTAGCAA GATACTGCGA GAAGCATAAT GCAGTTGTGT TATTCTmAAAT 360  
 GCATCCGTTT GTAAAAAATa GmCTTAATAT TcaCgTGaAC CATAGACCAT ACCTTAATCC 420  
 GATGTGGTCC AGATCCATCC GTGGAAAGTT AAACGGATAT TCCnC 465

(2) INFORMATION FOR SEQ ID NO: 969:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 300 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 969:

AATTCGGAAC AACGAGCTGG CAACAACATA AGATGACAGA GGCGAATGGT CAATCAATTC 60  
 AAGTTAACTT AAATAATGCG CAAnGCGATT TGGGATATTT AACTGCTGGT AATTACTATG 120  
 CAACAAGAGT GCCGGATTTA CCAGTAGCGT TGAAAGTTAT GAGGGTATTT ATCGGTATTC 180  
 GTAAAGATGA TACAACACh ATTTACTCAC ACCTATACTC TAAAAGATTn CACACGTCAT 240  
 CACAACGCG ACTTGAGCAA CATGGACAGT TCCTAATGAA CATAATCAAC GGTATTGTTC 300

(2) INFORMATION FOR SEQ ID NO: 970:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 970:

5 ATACGCGAGC GAACGGTGAA GCGACTTGCT GCTGCAAAAC GTCTGCGACC TTGAGCAACA 60  
 ACATGAATGG TCTTCGGTTT CCGTGTTTCG TAAAGTCTGG AAACGCGGAA GTCAGCGCCC 120  
 TGCACCATTA TGTTCCGGAT CTGCATCGCA GGNATGCTGC TGGATTATCA TCCGATTTTT 180  
 10 AAAACGTTAT TAGGCGTTGT CGTTGCAATT CAATTACAG TACCTGCTTT GATTGGTGCA 240  
 TTGGTTGCCA TGAAATTTGA CCTATCGCCA TTAGCAATTG CTGTTGTGGC AAGTGCAGCA 300  
 TATGTAGGAA GCGGTGCAGC GCAGTTTAAA AATGGTGCTT GGATGATTAC GGGTATTGGT 360  
 15 GATTTAATnA ATACAATGAT TACAGCAGCG ATTGCAGTTG 400

## (2) INFORMATION FOR SEQ ID NO: 971:

20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 251 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 971:

AAGTGTAAGA TTAGAATAAA AAATTTATAA ACGAATTGAG AAAGACCAAA GCTAGCAATT 60  
 30 ATTCAGAAAT TAAATCGAAG AGTCCTACAG TTAATGACTT ACCTGAACGA GATTTATcna 120  
 ACAAATCTCA GTATGACCAA TATGGCAAAT GCCGTGTCCA TGTTAACTGA TGAAAAGTAC 180  
 TTTGGTGGTA GTTTTGAAAG ATTACAAGCA TTGACGACAA AAACAACATT ACCCGTATTA 240  
 35 TGCAAAGnCT T 251

## (2) INFORMATION FOR SEQ ID NO: 972:

40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 414 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 972:

TGAAGCTCTT aATAAATCTT TTCTTGAACA CACACCAACA AAATCGTTAT CTTCATTAAT 60  
 50 AATAAATAAT GACTTACAT CTTCTAAAAA AATTGTACAA ATAGCGTCAT AAAGTGTGT 120  
 ATTCTCTCTT AGCACAACAG GTTGAGACAT ATAGTCCTTA ACCTCAAATT GTCGAAGTTT 180

55

TTCTAAAAAA CCTGACATTG TTAATATCGC TAAATCTGGT CTAAGCGTTG CTCTTGTTAA 300  
 ATTCAACTTA TCTGCTATTT GTTCACCAGw AATGGGTCCT TTAGTTTAA CAATTCGAT 360  
 5 GATTCGTTCT TGTCTTTGAC TGAGTTCTrw AGGkCTTCac CCCTTTtTAT GCnC 414

(2) INFORMATION FOR SEQ ID NO: 973:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 747 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 973:

GAAATCGATA CTAATATCTT CTTTATTTAC ACCTGCTAGT TCAGCTTCTA AGTAATATAA 60  
 20 TTCGTCTGTt CATAtATATt CGTtACAAaT GAAGGTGTtG AAAaGTAAATT AAaTaCTTGT 120  
 TTaCCTAAAT CTTTAAaTGT ATCACTTGGA TTACCGTTAA AAAAGTTTtG ATTCTCGAAT 180  
 TGATTGAAGT TCAtATCATC ACTTCCATTA TAGAAATTTG TATTACAAAG CCATTATATG 240  
 25 AGTAGTATTA AAAAAGTTAA AGTAAAAGGG GAGATAAAAA AGTAATAAAT GGGTAGATTT 300  
 GTGCCTGATA AGGAATCAGG GCAAAAGAAC TGAGCATCGA GATTTATACA AGCAATAAAG 360  
 ATAATGAATA AACATATCGA TGCATACTTC TGCCCATCAC CTTATGATAG GGAGTTATTT 420  
 30 TTTGTCGGAA TAGTCAAAAT TTTTAGAAAC AAAATTCCGC AAATTATTAA TTATATCTGA 480  
 TGCTTCTCGT TCTGAAATGT TGAATTCATT AAAGACcTTA ACAGAAATTT CAGCAAGAGG 540  
 GCTTTTtTATT GCTTTACCTT GTTCTGTTAG AGAAATTTGT AGGTTTCTTT CATCTTTCTC 600  
 35 TTCACGTGTT CGAACAACGT AATCTTTCTT TTCTAATTTT TTTAGTAATG GkGTCAGTGT 660  
 TCCAGAATCT AAGAACACAC GTTCACCTAA TTTTtTGATG TTAAGTTTTT CATCATTTTC 720  
 40 AATCGCCAAT TAAACCAngG TAnCnGG 747

(2) INFORMATION FOR SEQ ID NO: 974:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 257 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 974:

TGCTTCCAAG TAATGTGGAC ATTTAATACG AGCTGGGATT GAGATACACC TTGCAATGCT 60

TCTTGgncAT TTGCATTGCT TCTCCCAAGT GAATGCCTTT AACAGCTTGT GTCATCATCG 180  
 ATGACTTGCC ATTGAAATCG ACAACCTTCA CCTTCAAAC TAGCATCTTT TATAATGCCG 240  
 5 nCTTCTATAT CAAATGT 257

(2) INFORMATION FOR SEQ ID NO: 975:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 451 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 975:

CAATGGAGCA TATTTTACGT TCGGCAATGG ACATTGATCA nACAACAAAA CATTATATAA 60  
 20 mTAATAAAGT AGAAGTTATC AAAGAAATTA TTAAAAAAGT AAGAGGGGGA AATCACGTGA 120  
 CATCACAAAA TCCAGAAGTT AATTACGAAG CATTAGCTAA ATATGGCCGC GACTTAGTAG 180  
 AAGAAGTTAG ACAAGGTAAA ATGGATCCTG TTATAGGAAG AGATGAAGAA ATTGAAATA 240  
 25 CGATTCGTAT TTTAAGTCGT AAAACTAAAA ACAACCCTGT GTCATTGGT GAACCAGGTG 300  
 TTGGTAAAC TGCAATTGTT GAAGGATTAG CGCAACGTAT AGTTAAGAAA GATGTGCCAG 360  
 AATCATTATT AGATAAACT GTTTTGGAGT TAGATTTAAG CGCATTAGTA GCGGGCGCTA 420  
 30 AATATCGTGG TGAATTTGAA GAGAGATTAA A 451

(2) INFORMATION FOR SEQ ID NO: 976:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 571 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 976:

AACTATTAAT AATATTAAGT TCACTACAGA TGTTGCTAAT GGACCATAAG TTTTAAAGAC 60  
 45 ATCTTCACTT TTATAACCA CAATCGCATC TAAAAATTGA ACTAAGATCA TTGCAATGGA 120  
 TATAGTTATC AAAAATATAG CACTATGAAT GACTAAAGAA AnAATAGCTA ATAAaAATA 180  
 AGGTAAGCTT CGACTAAGTG cATAATATGC ATTTATATTA TGGCTAGATG CACATGCTTG 240  
 50 AATTGAATAA CCTAACTTA CACTGGCACT GATTATTGTA AATATTGCTA AAACAAAATA 300  
 CATGTTAATC CTTCTTTCTA TATTTGGATA TAAACAAGTA CTTGTCTAAA GTTATTTAAA 360

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TATAACTATG TCATAAACTG AATTGTGGA AATTTTTCAT TATGCAAATT TATTAATAAC 480  
 AAACAGCTCG AACTATAGCA TCATTTTACT AATGAATGCA TTAAAGTAAC TATGACTAAA 540  
 5 AATGCATATT AATTATCATT ATTAAGACTA T 571

(2) INFORMATION FOR SEQ ID NO: 977:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 977:

CCCGAAAAAA TTTAGACATT TTCAAACAGT AACATTTGAA GATTTGTCTA AGCTGGAAAA 60  
 20 GAGTAGTATG CCATCAGGGG TCGGTATATT AGGCTATGCT GTTGACAAAG GTGTTGCTTT 120  
 AAACAAGGGG CGCATTGGTG CAAAAGAAGG ACCAGATGCG ATTAAACAAG CATTTGCAGG 180  
 TTTGCCGGAT TTGAATCCAT GTGnACTTTA GTCnGATTAC CGGAATGTTT ATCCTGGTCA 240  
 25 TGGGGGAATT AATTGGATAC CCCAAAAAGG AATT 274

(2) INFORMATION FOR SEQ ID NO: 978:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 877 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 978:

nTnTTACTTC TTCTTTTAAT ATTTCTCGTA TAGCTTCAAA TTTTTCCTG TCAAACAGTG 60  
 40 TTCTTAATAT CCCTTGCTTT TCACGACTGT TTGATATTAA AAAGCGTTTG AATTCACCTT 120  
 GAGGCAAAAT AAACAATTGT CGGAATTGAT CTGCATTTAC TCCTAATAAT TCAATAATGA 180  
 ATTGGGTACC TGAAATTACT TTACTTTCTC TAATTTTATA CTTGCCATCC ACCATCTCAA 240  
 45 ATaCATCAAA TTTAGCGTTC GTTTTTGTTG TATTACCTTC TTTGATATAA GGGCCTTGTC 300  
 TATGCACTTT ATAAATTCTGA TGATTTAATT GAAATTCAAA TGTTACTGAC ATCGGCTGTT 360  
 TACCATCAGC GAAATGACTT CTCAAATCAT TTTCTTCTCT TTGTTTCTGTT GATGCTTTTAC 420  
 50 CAAACAAGGC ATAAGTCATT GCATCAAAAA TCATTGTTTT ACCCGATCCA GTCTTACCAC 480  
 TTATTAAAAA CAATTCATTA TTATCAATTT TAGAAAAATC AATTTCTTCT TTAAAAAAGG 540



CGTTTTCTAA AATATTTTTT ATCTTTTtag ATTGGATATC CgATAATTCT TTATCAGTTA 660  
 TATGTTTATA AAACATTTCg ATAATTGACA TGTCatCTTT TTCACTTATT TCyATAGCAT 720  
 5 TATTTTCTTC ATnGTAATTA AAAGTTTCAT TCGTCAGCGC TAAAGTATTA GGATAAATn 780  
 GTTTAAACT CATCATTGGA TCAGTAATAT GAGACATATT TTAAAGTTTA AAATGTAAAA 840  
 TAATTATCGT TATnTTTCAC ATGAACTTnT TCATTAA 877

10 (2) INFORMATION FOR SEQ ID NO: 979:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 624 base pairs  
 (B) TYPE: nucleic acid  
 15 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 979:

ATTGGTACTA TACCATTTGT CCATTTTAgC GAAGACGTTA AACTATCGAT TAGCTAGTGA 60  
 AGAAATTAAT CTCACTATAC CTTCTATACA TAAGCAAATT AAAAATTTAG AACAGCATCT 120  
 25 CAATGTGAAA CTATTTGAAA CTTATAAAAA TCAAATTATC TTGACTGAAG ATGGTCATAC 180  
 ATTTCTTCCA ATTGCGCAA GTTTTATTGA ACAATATGAA AGTGGCATCA AACATATCCA 240  
 ACTTAAAAAA ACGATGTTTC AATCGAAATT AAATGTTGTC GTGTCTTCAT ATATCGCGAC 300  
 30 ATTCATTATG CCCAAATTTT TAAATCTTT CTTTAACGAG CATCCTTTTA TCGATGTTTC 360  
 TCTTCATGTC AAAAATGAAA ATATTGAAAA AGATATTAAT AATCATACGT ATGACATCGG 420  
 GATTAGCAGA AATCAACCTA AACTAAGAGA AGTTCATTCT GAAAAAGTAT GCGAAGGTAA 480  
 35 AATTGTATTG ATTGCTCCCA ATAAAGAGAA TAATCATCTT CTAAGTGGG CATCTTTATT 540  
 TGAAAAATAC AAAATAATAA GTGATAACCA TCCAGAATAT TGGGTCATCA CTTAAAAATA 600  
 40 ATATTTTAAA TATTTATGAA AAAG 624

(2) INFORMATION FOR SEQ ID NO: 980:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 457 base pairs  
 45 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 980:

TTTGTCTGT TGCATAAACT GCAGCTAGCA TAATGTTAAT TGTGACCT ACGCTAACCA 60  
 55

TkGATTTCATC AATTTTCAGCA CCTAAAGCTT TAAATCCTTT AATATGTTGA TCAATTGGAC 180  
 GTGGCCCAAG TGGACATCCT CCCGGTAAAC CAATCACACA TTTTTTAAAT CTACCTAACA 240  
 5 TGGCACCCAT CATATAGTAT GAAGCACGTA ATGATTCAAC TTTATTATTT GGtAATGCAG 300  
 CATTTTGlAT TTCAGTTGTA TCAACTTCTA AwTCCGTACC ATTTaGTGaw GcCTTAAtAt 360  
 TTAAAtCtkC tAAATAAACTC aCTAAAGTTT TAACATCAGA GATTThGCGG TAACCCTTCT 420  
 10 AATTTACAT GTCCTTGAGC TAATAATGTT GCAGGAA 457

## (2) INFORMATION FOR SEQ ID NO: 981:

(i) SEQUENCE CHARACTERISTICS:  
 15 (A) LENGTH: 997 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 981:

ATTGCAGCAA CGCCCCCTGT AAAACTACGT ACTCTTACAT TTATGAAACC TGCTTCTTCA 60  
 25 AACATGCGCT TCAACTCTTC TTTTCCAGGA AAATTAAACG TAGATTGCTG TAACCATTCA 120  
 TATTCTTCTT TTGATTTTGC AAATAATTTT CCAAAAATAG GCATAACAAA TTTAAAGTAT 180  
 AGTGCATACA TTTGTTTAAA GACTGGCAAA GTTGGTTGGC TCGTTTCAAG ACATACCACC 240  
 30 ATACCACCTG GTTTAAGTAC TCTATTCATT TyTTTTAaCG CGACTAAATA GTCTGGCACA 300  
 TTTCTTAATC CAAACCCAAT TGTTACATAA TCAAAAGAAT TGTCTTCAAA CGGCAATTCC 360  
 ATTGCATCAC CATGAACAAG TTTAACATTT TCCATTGAAG CAGTTTTTTC TTTTCCTACT 420  
 35 TCTAACATAT TCTCACTAAA GTCAATACCA GTAACCTCAC CTGTTGGTCC TACAGCTTTG 480  
 CTTAATGCGA TTGTCCAATC ACCAGTACCA CAACAAACAT CTAATGCTTT CGTCCCTTTT 540  
 40 CTAACACCCA TGTCTTTCAT GACGCGTTTT CTCACATACT TATGCTGCTC AAAACTAATA 600  
 ATATTATTTA ATCIATCATA TTTTTTTGAA ATATTTTGAA AAACGCGATG TACTTGCTCT 660  
 TTATTTGCTT TATTGTCAGC CATGCTTAAT TACCTCTACT TTTTAAATAA CTTTTTTGGA 720  
 45 TATCGTGTA GTAATGCTTT ACTTCACTTT GATTATATTT CTTGAAGTAT GATGGATAGT 780  
 AATCAGACAT ATCTTCAAAT AAATAATTAT ATATTTCCGA CTCATCAATA TTGATACCGA 840  
 AATGAGATAA CGTAAtATAT GGgAAAAGTG tTTCAATTTT TACTATTGCT TGAGAAATTT 900  
 50 CATAATCATT TAAAGCTTGA TGATGTAATG AAGATTTCAA TTCATTAATT TCAACAATTG 960  
 CTTTACTAAT TTCATTTTGA AATGATAAAT CATTGAT 997

55

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 982:

10 CATTCCTTT ATCGGnACAA TTATTTTAAA TAATTGGTTA ATAAGTTTTT CTATTAATTG 60  
 CTGTTTTACT TTCTAGAGCA ACAATAAATG TTTTCAGTTT AAAATAATTA AGATTGTCAT 120  
 15 TTACTAATTT GCTTTTTCCA TTCTTTAACC ATAAATCAAC TTGTAATTGC CACTCAATAG 180  
 GATGATTTTT AATATAAATT TGCTCTGGAA AAATATAACC ATAATTGTGC ACTACTTCTT 240  
 GATCAGTTAA CTGTAATTGA TACATTGCAC TTAAAGTGGG TTCTAAAACA GAATTTTGCC 300  
 20 AGCGACAATA TTTGATATAT TGATTAATTG CGAAGTTTGA TAATTTATAA ACAGCATGAT 360  
 AATCACAAGG CGCCTCATTA ACAAACCTCAC TAATTTTGGC ATTTCTTTTT TCAGCGACAT 420  
 ATTTGTGCCC GCCTAAATAT TGTATTTGTT GAAACATCAT TATTTGTTTT TTCTCTAAAT 480  
 25 TGAACGTATG AAGTTTTCGA GTGAATGGAT TAATAACAT ACTTTGAAAA TGATTGAACT 540  
 TCACTTTATT ATGACAATAA TCAACATCAT TTAmTAACCA ACTTACTTTA TATCCCATTT 600  
 TCTTKAAACC TTCCGTTTGT TGAAGAATCT GTTTATAAGG AATTGGCGAA TACTGTAGCT 660  
 30 CAATAACATA TTTATTATTA ATCAAAATAT CCGGAATTTG TTTTATTTCT TTTAAAAATG 720  
 GCTCTATCTC TACTTTACAT CCTTGTTGCT GTATCATCTG TGCTAAAATC AATTTACTTT 780  
 35 TATAATGTTT AATCGTTTCA TTATTAACAA ATTTTGTTC CGCTAAATGT TTATGTGCAA 840  
 AATGACTAAT TACTTTGAGC CCACGCTTTA AAATAACTTG CTTGCCACAC ACCGGACAAA 900  
 AATATTGTGT CTTTCTCAAT GCAGTAGTTG CTAATACGCG TTCCTTTTCT TCATTTAAAG 960  
 40 CTACTAACAT ATCTTCACCT CAAAATATTA CACGTAAGTT TAACTACTAT TACTTTTTCa 1020  
 GCTTTGGAAA TCCATTAAAA AAAAGGGACC CCCAAAGGAG GCCTCCTTTC ATAnGTGCGG 1080  
 TGGCCTAATT AAATAATCCG TTAATTCAG GTGGnCnC 1118

## (2) INFORMATION FOR SEQ ID NO: 983:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

CATCCCCTGT TAAAAATTGn TATTTGTGTA TTGATGCTTC TCAGnCATTA TTACGAGTCC 60  
 ATATTCATTG CTTCAGTGAA ATATCAGTAG CAATAACATT TAAATCCGGC TTTTCACATT 120  
 5 TCAAGGTAAT TGCAGTACAC CACTACCCGT TTCCGATATC TACGGATTGT TGCATCATCT 180  
 TCTAACTGTT GGTAAGAAAT GCAACCATTA CTGCTTCAGT TTCAGGTCTG GTATCAAACA 240  
 ATTTGAGTTT ACATCAAACG GTCTACCTT 269  
 10

(2) INFORMATION FOR SEQ ID NO: 984:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 298 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear
- 15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 984:

AACCCCACTG GAAnnGGTTT TGGTGAAAAA ATTTTAGGTC CTTTATCTGT CGTGCGAATC 60  
 ATTGTATTTT TTAACTTTTC CGCATAATCT TGATGGTCGA TTAACTTTTC GCGATAACAA 120  
 25 TATTCAATCA CTTCAGAAAT CGCTTGCTCT GATATCTCTT CTTTTTGTAAT ATATTGTATA 180  
 ACTTCTTTTT CAGTTCTCTT TTTATATGAT AAATATTGGA TTGCTTTATT TAAACCTATG 240  
 CGATAATGAT CATACTTTTG AATCTCTGCC ATGTCAGCAG CnTCAAGTTG TnGCCCTT 298  
 30

(2) INFORMATION FOR SEQ ID NO: 985:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 431 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear
- 35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 985:

CCATGCGATT CCACCTATTA ATAGTAAGAC AATAATAATA GGAATTATAA TTTTAACTT 60  
 TTTAGACATT TTGCTTCCTC CCAATTATTT ATGAGTTAAT CATATCAGAA CAATACATTT 120  
 45 TATTAAATGG TTTATTTTAA ATTTTGTTTA AATTAATAGA ATTTTAGTTA TAATAATGTT 180  
 TAATAAGTTA TTGGrAATCy AATAAACTAC mAAAAATAGT TTGATTACaT AATGATTctT 240  
 50 GAAAAATGkT GGkTAACyTA ATAATATGCA TTTTTTkGGC GArGARgATT tATTtAACyT 300  
 ATAAAAATAT kGAaGTAAGA TtGGGGAGAT tATGAATTtA TGGrATTtGAA AGTCGATGAT 360  
 TTTGTAAAGA ATATAAAAAG ACCATACTTG ACTGTATTGG GAGTATTTGT AGTTGCAGTT 420  
 55

## (2) INFORMATION FOR SEQ ID NO: 986:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 329 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 986:

```

AAGGTTAGGn TGGAGTACCC AAAGTAGGTT TTAAAGGTTG GAAATACnAG GAGGATGAAT      60
AACATGAATC AGTCAGTCAA ATTACTTAAA CATTTAACAG ATGTAAACGG CATTGCTGGT      120
TATGAAATGC AAGTTAAAGA AGCAATGCGT AACTATATAG AGCCTGTCAG TGATCAAATT      180
ATTGAAGATA ACTTGGTGGC ATTTTGGAA AGAAAAATGC TGAGAATGGT CAATACTCAT      240
TATGATTCTT GGTCTATGGA TGAAGTGGTT ATGGTAACAA GATGTAAACT GTTATTCATT      300
ACGCGTGGTG TGTGATCAGC nGCACTCAA      329

```

## (2) INFORMATION FOR SEQ ID NO: 987:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 545 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 987:

```

CATATTATTT nTATATGAGT TTACCACTGT CAAAAAACA ATTGCTTAAT GCCAACTATA      60
TTACATGCAT TGTTTAAACA TTAATTGGAA CGCTTGTTAT TAGTTTATAT GCTTATGAAG      120
CAGATGTGAT TGAACCAAAT TCAATCTATT TTTCAACTGC ATATGCATTT GTCATATCTA      180
ACTTCTTGTC TATACCAATT GCATTTAGTC AATTACAGA ATTGCGTAGA GTCAAAGTGC      240
CATATGGTAT ATACGTGTTT ACTATTATCA TTTTAGTTCC ATTTTATTT TCAATTGCAA      300
TAGTATTGGT GAATTATTTT GTTCTAAGTC AATCATCATT CCCAGATTTA TATTCATATA      360
TTTTAAATAT TGGTTTTCTA ATTATAAGCA TTGTATACT TATTGTTAAT TATTTTAAAC      420
AGCTCAATAA AATAAATACT AGAAAATTTA AAGGAGGCAG TCGATGAAAT TAGAACATAT      480
TACAAAAAAA TACGCTCAA ATGTCGTTT AAATGATATT GATTTTGAAT TTGGCGAnAG      540
TAGAA      545

```

## (2) INFORMATION FOR SEQ ID NO: 988:

(A) LENGTH: 607 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 988:

|    |                                                                    |     |
|----|--------------------------------------------------------------------|-----|
| 10 | ACCTAGCATG ACATAATCAA ATATATCAAA AACACCTTTC TGAAGTGAAT CAACCGTTCC  | 60  |
|    | AATAGTTAAT GGTCTTTCAG AATCAGATGT CTTTCCACCT TGAACAGTCA GATGACTAAT  | 120 |
|    | TAAATATTG ACGGCATCTT CATCAATTTT CGGTGCTATT GTTCAATAC AGCGCGTAAT    | 180 |
| 15 | TCCCTGTTGA TGTGTTTCAA TGGTGTCTATC TTCAAAGTAG TGTTTCATTT CGCTCACAGT | 240 |
|    | AGCATAAGGG AGTGATATAA AATTAACCCC ATTTATCTCT ATTGGTGAAT TAATCGATGT  | 300 |
|    | AAAATCTGTT CTTATAAATA ACTGATTATG TTCAAACCAA CTCGCCCCAT AGTTTAACCT  | 360 |
| 20 | CTCTTTACCA TCGTGATTTT CACTAATAAT AATTATTGGT ATACGCAGTT CTAAATTAA   | 420 |
|    | CTTTCCAATC GCTTGTTCTA ATAACATGAT TGCATCTTTA CTTGGATATG TTGTGTCATA  | 480 |
|    | TAAAcTCCAG CTATCACAAT GrTATCAGGT TCTTCTTCTT TCATTTTTTC TACGAACATA  | 540 |
| 25 | TCTAAATAT ACGCTTGaTC TTCTAAAAGC TGTTTGCCAT CTAATATTTT CCCTAAGTGC   | 600 |
|    | CAGTCTG                                                            | 607 |

(2) INFORMATION FOR SEQ ID NO: 989:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 722 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 989:

|    |                                                                   |     |
|----|-------------------------------------------------------------------|-----|
| 40 | ATCGCGTTAA GCAACAATTA CAACAATCAT CATATAAGCT AACGCCACAA CGCGAACTAC | 60  |
|    | TGTTAGAGTT CTAATTGAAA ATGAAAAAGA TCATCTAAGT GCTGAAGACG TATATCTGAA | 120 |
|    | AGTAAAGAT AAAGCGCCTG AAATTGGCTT GCGCAGAGTA TACAGAACGT TAGAGTTGTT  | 180 |
| 45 | AGCTGAACTA AAAGTTGTCG ACAAATTA AATTGGTGAT GGCGTCGCTC GTTTTGATTT   | 240 |
|    | AAGAAAAGAA GGCGCAAAAC ATTTCCACCA TCATTTAGTA TGTATGGAAT GTGGTCGTGT | 300 |
| 50 | AGATGAAATC GATGAAGATT TGTTACCAGA AGTTGAAAAT CGAGTTGAAA ATGAGTTCAA | 360 |
|    | TTTTAAATTT TTAGATcATC GTTTAACTTT CCATGGTGTG TGTGAAACGT GCCAAGCTAA | 420 |
|    | AGGTAAAGGA TAGTAAATTG CGTAGGTAA ATTAACCTTC GCTTTTTTTA GAGGTGTGGT  | 480 |

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TAACACAATT GGTGCTTATA GACGTGATTT GAAAAAGTAT CAAGATTATA TGA CTGAACA 600  
 TCATATCTCG CATATTGATT TTATAGATCG ACAATTAATT CAAGAGTG Tn TGGGGCATT 660  
 5 AATAGACCAA GGGCAATCTG CTAAATCTAT TGC GCGATTT ATTTCAACAA TCCGTAGTTT 720  
 TC 722

(2) INFORMATION FOR SEQ ID NO: 990:

10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 366 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 990:

20 ATCCAAAAAA TACGAAAGCG CTTTCTATAT TGGTATGCAA GTATTTCAA AAGAATAAAT 60  
 TTAATTTTCC TACTTTTCTA AACATTTATC TTTATGTATA ATGTTTTCAA GTA ACTAAAT 120  
 TATAAATTAA ATAAAGGGAG TGTTTATCAT GCTTACAATG GGGACAGCAT TAAGTCAACA 180  
 25 AGTAGATGCC AATTGGCAAA CTTATATTAT GATTGCCGTC TACTTCTTGG G TnATGACTC 240  
 CAACTTATTG ATAGTGTTnT TATGTTTCAG ATAATGCCCG ATGACTTTGT CATGCCAGCT 300  
 CCACCGATTT TGAGnAACGA CAGCGACTTC CGTCCCCAGC CGTGCCAGGT GCTGCCTCCA 360  
 30 GTATTC 366

(2) INFORMATION FOR SEQ ID NO: 991:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 338 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 991:

TGACTACAGT AACATTACCT GTAAATAATG ATTGAATGGC TTCATTTTCA TCATGAATAC 60  
 45 CTGTAATAAA TTCTAATTCT TCATCTGAAA CTTTACAAT ATGCGCCAAT GGCAAAAAGG 120  
 TATGAATAGT TTGTCTTAAA TCTTCAGCGT TATCCCATAA TGGCAATCTT ACATTAGGAT 180  
 CAAATACGAC AGTACCATTG GCATTTAATG TTTTGGTAAT CAATTGATAA TGTGCATCTC 240  
 50 TCATCGGACT ATCGACCAA TCAACAGAAC AAAAATGTAC TACATCATTT TCATTACAT 300  
 CaATATCATT CACAAAACtk GGkTCaAaTA aCATATCn 338

55

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 992:

10 AGTTCATCGT ATTCTTAATA CCTATATGCT ATCGTTCACA AACTTTTGTT CTTTCTTCC 60  
 AACATACCGC CTATAATGCT CAAAAAGAAA TCAGCAGTGG AACCACTACG TTCCCTACCG 120  
 15 CTTTATCATT TTCAGGCTTA AATATTTTGA AAATTTTGTG AGGAATCCGC TTAAAAAAAC 180  
 TCATATCTTC AAAAAAATG ACAAATTTA AATTTTGA TAACATCATT TTTTAGTAAA 240  
 TGTATAATT TCTTTATAAT ACAAATATCG AAAGAAGGCG ACTGACTTTG AAAAAATTAT 300  
 20 GTTCATTAAT TGTAAGTAGC ATTAGTTTGT ATCCTTGCCA TTATCAGCTT GTGGNAAAGA 360  
 ACnAACnAA A 371

## (2) INFORMATION FOR SEQ ID NO: 993:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 530 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 993:

35 ATAATGATTT ATCAATCGAT GTTAGATGCG GTTCAATTAT ATCCTAAGTC TATCGTGGTT 60  
 GATTATACTG TGGATGGACA ATACaAAAAT GATTGTCACT ATTTGGGTCA ATCATCGATC 120  
 AACATTGCCG ATTGGGCTCA AAACAATAAT TATTATCCTA ACCTGATATA TGCGATTCAA 180  
 40 CAGACTCTTG ATTTAATACA TTATTACTCT GTAGAAACGA TTTTCGATTT AGCTTTATTG 240  
 ACACTTCTGA AAGGTGATTT ATCAATCGAT GGTCAATGTCG TTTTGGATTT TAAAGCCCCT 300  
 ATAGCAACAA GTGCTTCAAT ATGGGAAACT ATTAAACTA TTGAAGATTT TGATATGATG 360  
 45 TCcAGTTTTt TTGAtAAAtG GCTTATATtG ATCATCATCC TATACCTTTT CGCAACCTTT 420  
 TTATCGAGGA TTCAGAACAA CTTAATTCGC CAGATAATTG GTTGATTCTT ACCAAGTTTA 480  
 50 TGCTACCTAA ATGGGnTATA TAAAATAAGC AAAGCAACGT GCTGATAACA 530

## (2) INFORMATION FOR SEQ ID NO: 994:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 551 base pairs



(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 994:

|    |                                                                   |     |
|----|-------------------------------------------------------------------|-----|
|    | TATTGGATTn TTnCCACCAA AGGCAACGGT TCCTTTTCTA ATTCTAATAA TCAAATCCCC | 60  |
| 10 | ATTAATATCA ATCCCACTCA AATTCTTTCA CATCATTGAG TATAAAATAA TATGGTGATA | 120 |
|    | TACGTTGAAG TTGATTnTCT TATTTAAGTA TACTCCAACA GTATTTTATA AAATTATTTA | 180 |
|    | GTCATCATCT TCAGTGTTTA ATTCAAAAAT ATAGAATCTA CTGTATTGCA TAATAAATTG | 240 |
| 15 | AAATGCCACA AATTGTGTAC AAGCAATAAT AATGATACTT ACCATTATGA CAAACTTGGA | 300 |
|    | TTCTACGACA TTGGGCACCA ATATATATTC GATAATTCTT TCAATATATA TAAATGCGCT | 360 |
|    | CAACGCGGTT AATAATAAAC CGAAATGTGT TTTaGTTTTA CCACCCCAAC GTTTTGTyAC | 420 |
| 20 | TTTAGGTAAT TTTAATAACG TGAACATTCC GCCAATTACT AATAACAAAT AACTAATTAT | 480 |
|    | GATTGAAATC GTACCCATCA ACCAATAATT GAATAGGTCA TAATGATTTT GTACAGCAAC | 540 |
| 25 | AAAATAATAA A                                                      | 551 |

(2) INFORMATION FOR SEQ ID NO: 995:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 729 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 995:

|    |                                                                   |     |
|----|-------------------------------------------------------------------|-----|
|    | ATTCGCCACC ATTAGGTAGT GGAACACGAA CTCATCATC TAAACCTTTA CCAATTAACG  | 60  |
|    | CTTTAGCCAT TGGTGATTCA TTTGAAATCT TACCATTAAA TGCATCTGAT TCAGCTGAAC | 120 |
| 40 | CAACGATTTG ATAACCTTCC TCTTCATCAC CTGGTAATTC TACAAACGTT ACTGTTTAC  | 180 |
|    | CAATTTTAAC AACGTTGTGA TCTCCAGTAT CTTCAATGAT TAATGCATTT CTTAACATAT | 240 |
| 45 | GCTCAATTCT TTGAATATCT TGTTGATGA ATCCTTGTTT ATCTTTTGCT GCATCATACT  | 300 |
|    | CAGAGTTCTC TGATAAGTCA CCAAATGAAC GTGCAACTTT AATTTTCTCT ACAACTTCAG | 360 |
|    | GACGCTTAAC TGTTTTTAAT TCTTCAAGTT CACGCTCTAA TTTTCAAAA CCTTCTTGAG  | 420 |
| 50 | TCATTGGATA TTGCTTTTGA TTTTCCATAT TGTCATCTTC CTTTACTGAA TTATACTATT | 480 |
|    | GCTTGCTAAC TAAAGACTGA ATTTTGTGTT TCATAATATC TATTGCAACT TTATTGCTCC | 540 |
| 55 | CACCTTCAGG AATAATTATA TCAGCATATT TCTTAGTCGG TTCAATAAAT TGGTCATGCA | 600 |

TTAGTATCTC GTGTTGAAAC GCGTAATAT nCTCAAGTCT GGCATCTGTA TCAACATATA 720  
TnTTnAACA 729

5

(2) INFORMATION FOR SEQ ID NO: 996:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 325 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

10

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 996:

GACAAATATA CTGCTTCTAC TCAAATATTA GTGAACATGA AAAAGTCCTC AAGTGATTTA 60  
 GCTTTCCCAA AATGTTCAAA GTAGTTTGCA GTCTGTTAAT ACATATACGG AnATTATCAA 120  
 AAGTCCTAGA TTCTAGATAA AGTATCTAGA GAATTGATGG TCAGTATTCA ACAGCTGAGT 180  
 GAAATCATTT TAAAAGTAAC CATCCAACCA ACTCTCAAAT TATTACTGTA CAGTTACACT 240  
 GGGATAATCT GATCTGACAA ATGTATAAAT ACTAAGTTT GCCAGCAGCT AAATAGAGGT 300  
 GTATGTACGA CTTCCAnCTG TAGnG 325

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(2) INFORMATION FOR SEQ ID NO: 997:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 271 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 997:

CTTCAGTTGT CGGCAAATCT TCTATATTGG AAATACCama TACATTTAAA AATAAATCAG 60  
 TAGTAATTAA CTGTTGGCTA CGCTGTTCAT TAACCACTTT AGCCTCAACT AGTCCTTTGG 120  
 CAATCAATGT CTTAACTGCA CCATCTGAAT TGAtACTACG AATTAATTCA ATATCACTTC 180  
 TTGATAATGG CTGGTTATAA GCAATAATTG gATAGTACTT CCATTGCTGC TTGTGataAT 240  
 TTCATTTGTG aCTTTTGTTC AATTGAATTG T 271

45

(2) INFORMATION FOR SEQ ID NO: 998:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 498 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 998:

5 TTTATGTGCT AATTTGTAAT TGAGATTCAT AATGGTATTT AAATCATTAT GGTGCGGGAG 60  
 TTATGGTATT GCCATAATAT GAGAGTGCAT CCACCTCTAT AAGTAATGCA TATTGCGAGT 120  
 GCAGG<sub>a</sub>ATGA ATGAGTGCTT GATTAAAATC CTTATGGGTG GTTGACATAA TTAAAAGAAA 180  
 10 CCACATTTAA AATTTCTTAA TCACAAGCGG TTAAGTAGGT ATAGTTTAGT TTTGAGTAAA 240  
 TCTTTTAA GGTGTACTTG TGCATTTTAC TTAATTAAAG ACATAAGACA TTAAATCGGC 300  
 CTA<sub>AAA</sub>ATAAA TAAAAACTA CCTGTTTAGG TAGTTTTTTT AATGTAATAG ATTAAACAC 360  
 15 TAGTTCATTT CTTATTAAAG ATGGATAGTT ATTTTATAGA TAAATTTGTC CTTTAGTGTA 420  
 GCGGTAATTT TTAGGACTTT TTGGTGGnAA AAATGTTCTT AATAAAAGTA ATAGTCCTAC 480  
 TTTACCGCCA AAGCCATA 498

## (2) INFORMATION FOR SEQ ID NO: 999:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 568 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 999:

30 TGAGCTGGTT GTTTATTATC ATCAGTTTTC TTCTGATTAT CATCTGATTT ATCTTGAGAT 60  
 GCTTTGTCAT CCTTATCTTT CGACTCATCC TTTGATGCTT TATCATCATT CTCTTCTTTA 120  
 35 GCAGGACGTT GCTTTGTAGG TGCTTGTTGC TGAGGTGGCA CATATTGATA TTGATTCTGC 180  
 TGTGGCAATT GCTGATATTG GTTTGCTTGT GAATCTAGCT CATTCTGCTC TTTTCTCTCT 240  
 TGTGCTTTT TCTTCTCTC TTTTCTGCA TTTCTTTTT GACGCTTTTC TTTTGTTC 300  
 40 TGCTTTGTT CGTTCAACAT ACGTTCCTTA GCTTTATTCTG AATGATCTAC ATATGCAAAA 360  
 ATTGCAAATA CTAATCTCC GAGTAATAGC AATACCGTCG CAATGCTAAC TACTTTCGCT 420  
 GTTGACTCA TTTTCTCTT ACTTCCATCT TCATTTTAT TGTAGTCGTA ATTTGATTC 480  
 45 GACATACTCT CCCTCACTTC AAATAATTT AAATATAGAA ATTATCACGC AA<sub>c</sub>CATTAAC 540  
 ATTTTCACAA CTAATTTGCG ACCnAGTA 568

## (2) INFORMATION FOR SEQ ID NO: 1000:

- 50 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1441 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 55

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1000:

```

5  AGTGTTTCTA ATTGCAAAAT TCCAAATACA GTGTCGTTAT TTACTTTTTT CATGCTAAAC      60
   ATCTCCCAAT TAATAATCAC ATATTTAGCT ACTATACAAG TATTAACAAA CATCCCAACA      120
   ATCCCAAAAC TTGTATGTGC TAACTTATGC ATAAACTAC AAGTGTAAT AACTTGCTT      180
10  TCTATTCAAT TGTCAAAGTT GAATAAAATT AAATAAGTAT AAAACCAAT AATCAATAGA      240
   GTTAATATTT AGAAATAAGA TAATAGTACA TAAACAAAT CACTCTATTA CATATTAATT      300
   TTATAATTTA TATACAAAGA AAATATATCA ATATTACCAT TAAATGCAA CAATTCTACA      360
15  TATATTTCTT CAAAAAGAT ACGCATTGAA TTTTATTAC ATATAACTCT CATGAAAATT      420
   GATTAACTA AATTAATTAG TTAGCCTTAA ATTTAACAAA TTAAATCAA CCGAATGAGG      480
   CTAAATGGT TATTTTCAA GATATGATT GTATAAATCA AACATTTCT TACAAATCAA      540
20  ATGTGTATAA AATGTGATAT ACATTTTCAA CCTTAAAAA GTTCTAAAAA AAGATGAGCA      600
   TCTACTGTCT CATCTTCAG TTCITTTTAA CGGGTCTGTT TTCTAATTG AGCACAATCT      660
   TCGATTTCCT TATCTAAATG ACTACCAATT AAATCTATTT CTTCTATTGT TAAATCGCTA      720
25  TCTCCATCTT CTTTATCTC TGGTATTATT TTTCTTCAA CTAAGTCACG ATATAGTGTT      780
   TTTGAATTCT CGTTCAATT CGATTCGTGA TTTGAATAC TTTCTCCGC ACCAATGTAT      840
   ATCTATTGGC ACTAGCTTCT ACTTTGTAC CATCAATAAA AATTGAATTA TCATCAATAA      900
30  GATTTTGCTT TAAACATTGA CTATAGAACT GAATAAATAA AGATTCAATT AACGCATCAG      960
   TATTAGGATT CACTCTAAAA CGATTAATAG TTTTATAAGA AAGTGTTGA TCTTGGGCTA     1020
35  ACCACATCAT TCGAATACTG TCATGAAGTA ATTTCTCTAT TCTACGACCA GAAAATACAG     1080
   ATTGAGTATA TGCATATAAG ATGATTTTTA ACATCATTTT TGGaTGATAG GATGTTGCAC     1140
   CACGATGATG TCTGAATTCA TCGAATTCGC TATCAGGTAT CGTTTCAACA ATTTCAATTA     1200
40  CATATCGCGA AATATCATTT TGAGGAATTC TAACGAAGTT TCTATTGGTA GTGTAAGTTG     1260
   GGGTCATGTT ATAATTTTAA TACATAAGGC ACCTCTTTAA TTTAGTTTAG TAGTATTTAT     1320
   TAAATTATAC GaAGGGACCC AACACAGAAA ATTCATTTTA TTGAATTTTA CATTTATGTG     1380
45  CAAGTTGGGG AAAAATGTCT TATTTTTCa AAGTATTTAA AAGTAAAATT ACATGTTAAT     1440
   A                                                                                   1441

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## (2) INFORMATION FOR SEQ ID NO: 1001:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 587 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1001:

|    |                                                                    |     |
|----|--------------------------------------------------------------------|-----|
|    | TAATAATATC TGT CATATTA AGTCTCCCTC ATTAGAACTC ATTATAAATG AAGTTATTGT | 60  |
| 10 | GTGTGTCGCC ACTGCCATAA ATTAAATATA AAGTAATAAA TATTGCCAAA TACAATAGTG  | 120 |
|    | TTAATAAATA TGGTTTGAAT GCTTCAACAT ATTTATTAGG TGGCTGTTTA CTTTTAGATT  | 180 |
|    | TCATATTGCA CCTCTTAAAG TTCTTAGTAA AAACGCCTTT ATAAAGACCG TTCAATATAA  | 240 |
| 15 | AATACGTTTT AAAATTTGTT TTTTACAATT CATTATATCG ATATTCATAA TGAAATTCAA  | 300 |
|    | TTTTAATTTT ATAGATTCAA CATAGTAATT GGTGTGCATC ACTCAAKTAT TGTAATGAT   | 360 |
|    | ACACTTTGTT GAGrACATCA TTCATTTTAA AGGTTATTTA AACAAATAAC AATTACAGTC  | 420 |
| 20 | TATATAACAA TTTTGTATA TACGTCAAAA TCAAATAAAC TCATCACATT AATATGACGA   | 480 |
|    | GTTTATAATG TTATTGAATT ATCATCAGCG CAAATATATA CATTCGCAAG TCAAGCATAA  | 540 |
|    | CATATTTAAC AATTGCTTTG CTTGGTTTTA CCAATGGATT AAAAACC                | 587 |

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(2) INFORMATION FOR SEQ ID NO: 1002:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 522 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1002:

|    |                                                                    |     |
|----|--------------------------------------------------------------------|-----|
|    | CAATTGTGTC ATAATTTTGC TGATGATAAC TAATCGTTTT GGAGTAGCTA TTTGATGAAG  | 60  |
|    | TTCGTCCAAT ACCTTTTGTT GAATCGAATT TACCACCTGA GCGTATATGA AAATGTA CTG | 120 |
| 40 | TCTACTTTTG CAGTTGAAAT TTTATTTTTC GGCAATTGGT CTAATATTTC AGTTTACGA   | 180 |
|    | TTTCTTTTTA CTGAAAATC TACATGGTAC TCACTTGGAT ACTTTAACCA ATTTGAATTT   | 240 |
|    | TTTTCTTCTT TATGAGATTC AAACTTTAAA TTTGAATGAA TTGAGCCTTG TTTTTAACA   | 300 |
| 45 | AGTAATACAT TCTTGTGATA AGTTGGATCA TCGATAAAGT CGAATTGTAA ATTTTGGAGT  | 360 |
|    | ATATTtGTWt TCTCATCATA TACTGTTTCA GTTCGTTTTG TGATTTTACC GTTTTCCCA   | 420 |
|    | ATATCATCCG GTGCTGTTGA ATTTTATCTT TTATTAGTAA CATTACGTTG CTTTGTGAn   | 480 |
| 50 | CTTATCAACA TGTCTTCTAT TTGGCTGAnG CTTATGGnGA TT                     | 522 |

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(2) INFORMATION FOR SEQ ID NO: 1003:

(A) LENGTH: 323 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1003:

10 TCTTTGTTTG AGACATAATG TCATGTAAAG TTTTCACAAT GCGTTCCTTCA ACTTGTTGCC 60  
 TTGCCTCTCC TTTGAAAGGA ACAATTCGAT CTCCGAATAA GTCCTCAGGC TTGTATAGAT 120  
 TATCAAATAG ATAGACTGAC TCACCTTCAA ATATTCCAAA ATGCCATTCC TTCAGTCCCT 180  
 15 TAAACGTTG ATACGATTGG wTAGGTGCAA CATTTTCAAG TGTGTCACTT GCGCGTTCTT 240  
 GCGTGTATGA TGCATATAAA TCGAAGTTTA TCCCCTTAGT TTCATAATAA CTACGTGCCT 300  
 TThGAGCTTG AGCAATTCCA AGT 323

20

(2) INFORMATION FOR SEQ ID NO: 1004:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 320 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1004:

30 TTCTAACTTG ACGTGACTGG GCATTTCTGT GnAAATnTTC TGACATTCTT TTTAATATCC 60  
 GCAACGCAAT TGCTTCAGTT AAAGATTGnA ACTTGCAACA TTATTTGGTA CGAAAAAGTC 120  
 35 AGTTTTAATG TCGATATAAG ATTTATTTTT TTTGTTATAT AGTTTCGCAA CTACATTGG 180  
 TTGTCTTACT TGATCATATT TTGCAACCGT ATCGAATGCC GTCTTTTCAA ACAGCTTTAC 240  
 GAGATACGTA AACCATGACC CATCCATCGA AGTCCTTGGT AAAAACCAG GGTTCGGAA 300  
 40 GCCGTAGGGT TTGAAAGATA 320

(2) INFORMATION FOR SEQ ID NO: 1005:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 305 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1005:

50

nATTAATGCT AGCCAAAACA GAnTTGCAAn ATGTAAAGAC ATGTGAAACC CTCCTTATAT 60

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CGATATTTAT AAAAAATAAT ATTTCACTTA ACCAGTTTTT AGTTATCATT GCAATGGTAA 180  
 AGGATACGAT GAGTATCACA CCACAAATGA TAATACCAGG CAGGAGCCAA CATAAATCAT 240  
 5 CTAATCTTT ATTATATGTG ATTAAATAT TAAAGATAAC AAAAGTGGTA GTAATAACTA 300  
 TATTG 305

(2) INFORMATION FOR SEQ ID NO: 1006:

10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 334 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1006:

20 TTCAAGATAT CAGTATAAAT AAAAAGTTAA TATGCTCATT ATAGACAGCT ATAACATATAT 60  
 TTTCTCGTCC CACTCTATAG AAATCAATTT CATTATTAC CATTTTCTCT ATTTAAAAAC 120  
 ATATTTTGG TATTAACAAT TAAAGTGGG TATATATATT TAATGAACCA ATTTTGTAGG 180  
 25 AAAGTAGGGC TAAACCTATG GAAAATAAAT TATACCACAT GGTGTCCTCT TTTACCATGA 240  
 ACACAGTGAA TTAATAAATA TTAAnCAAGG TATTGGGGAA GTAnCACCAG CATTAGGTCC 300  
 AATTGGTAGC CACCTTCCAA TCCATTGGGG GnAA 334

30 (2) INFORMATION FOR SEQ ID NO: 1007:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 565 base pairs  
 (B) TYPE: nucleic acid  
 35 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1007:

40 AGAAAAATTG TTATATTAGA AGCGAATAAT TTTAAACAT ATTATGAAAT GTAAGAAGAA 60  
 ATATTATGAA ACTAGGAAAA GTAGATTGTT GAAAATTCCA TACAATAGGn GAnGTAAAGT 120  
 45 GAATAAATTC TGGTATTACT AAAGCTATTG ATTGTCCTAA TTGTAATAAA AAGTTGGATA 180  
 GTGTAGTTGA GGGGAGAAAA ACTAAATGC AAAAATATAT TCTCAATGGA TCATTATAAA 240  
 TACCAATTAG aTTAAAGTAT TGCGaACATT TACAATTAGa AATCAGTATT AATCTGCCAT 300  
 50 AGATAATTGT ATTAATGTAA AAmATAAAT AGAATGAGAA TATACGGAAA TTTTTTATAC 360  
 ATTTATAACC AATTCTGTTA AACTGTGAAG AGTAGAGTTA AAAACGAAC TTTTGTATTAT 420

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AATGATTGAA CGCTATTCTA GAGAAGAAAT GTCTAATATT TGGACTGATC AAAATCGCTA 540  
TGAAGCCATG GTTAGAAGTG GAAAT 565

5 (2) INFORMATION FOR SEQ ID NO: 1008:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
10 (C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1008:

CAACATTAGC GTCTAAACAA ATCTTTGACT AAACGTTTAC TTGAGCGACC ATCTTGATAT 60  
TTAAAATGTT TATCTAAGAA TGGCACAACCT TTTTCAACCT CATAATCTTC ATTGTCCAAA 120  
GCATCCATTA ATGCATCAAA GGACTGTACA ATTTTACCTG GAACAAATGA TTCAAATGGT 180  
TCATAGAAAT CACGCGTCGT AATGTAATCT TCTAAGTCAA ATGCATAGAA AATCATCGGC 240  
TTTTTAAATA CTGCATATTC ATATATTAAA GATGAATAAT CACTAATCAA CAAGTCTGTA 300  
25 ACAAGAGAA TATCGTTAAC TTCACGATGA TCTGACACAT CGATAAAGTA TyGTsTATGT 360  
TCACGTGAAA TAYyAAGTCy ATTtTTTACG AaCGGATGCA 400

(2) INFORMATION FOR SEQ ID NO: 1009:

30 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 454 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1009:

TATTGTAAAA ACTGTGGTTC TTACAATGGC GAAGAAGTAG CAGCTAAATA ATTTTAGTTA 60  
40 CTCAATATAA AAaGTCCCGC TTAAAATGAT TGTTTTAAGT GGGACTTTTT ATATTGCGAA 120  
AAATAATTGG cGAACGAGGT AACTGGATAC CTCATCCGCC AATTAAAATT TGTTAATTTA 180  
45 ATAATTAAAT ATAAAGACGA TTTATTAGTT TTTACGTTTT CTAGGTAATA CGAATGCAAC 240  
GATGCTACTT AAAGCTAATA ATGCCATTAA TGGTAATGTC ATATCTnTAT TTGATTCTTC 300  
ACCACTTTGT GGTAAATGATT TTGCTTTATT TTCTTGtGTA TTTGTATTGT TTTGGCTTTG 360  
50 GAGTGTGTCC ATCATTTGTG TTTTAAATGT TTGCTTnTnG TAATGGAGCA CTAATCTTTT 420  
GCCTCGCTAG AACCTGCCGG AGGTTTGGAA CCAC 454

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- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1010:

GGTACAACAA CTTTAGACAA TGAAATATTA AAAGATACGG ATGATAAAAA GTCGAGTAAA 60  
 ACTTTTGTG GCGGAACAAA AGTTGATGAC CAACATGCTA GTATCGGAAT GGATTTTGAA 120  
 AATCAGGACA AAACTTTAAC TGCCAAAAAA TCATATTTCA TATTAAACGA TAAAATTGTC 180  
 TTCTTAGGAA CTGGCATTAA AAGTACTGAT TCATCAAAGG ATCCCAGTTA CCAACCGATG 240  
 AAAATCCGCA AGCCGATGGG GAATACGGTA TTTTCCGGCC GTTAACCAAC CACCCATTCC 300  
 GGTATCCGG GAAACCATTC CATCCTTTTA GGAGnCCCG GTnCCnAAAA GGACCTCGGG 360  
 TATCCTTTTT TTAACCAACC CGAAATTACT GGTAAAAAG 400

(2) INFORMATION FOR SEQ ID NO: 1011:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1011:

TTAGGTATTC GCAAAAATGA TCTTCAATAT ATAGCTATGG CAAAAGATG GGCTAAAGCT 60  
 TATACAATTA CTGTAGCAGT GGGAGTTGTT ACAGGTACAA TTATAGGACT TCAATTATCA 120  
 TGATTTGGCC TACATTTATG GAAATGGGTG GACACGTATT GCACTTCCTT TATTATGGGA 180  
 ACATTCGGT CTCTTGAGC TATTCTTAA GTATATATTA TATACTGGGA TCGTTTAAAA 240  
 TAATGGCACA TTCTTAATAG TATACCAGTA ATTATGGGGC CTTCTCAGCA TCTCATACTC 300  
 AGGAATCATT ATGAATACGC CTGCAGGTTT GAGTGAAGAT GGAAGTGGCC ATGTCACCT 360  
 AGAGCGTGTT ACCCACGTTA AGTCGTCATT nCGAATACAC 400

(2) INFORMATION FOR SEQ ID NO: 1012:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1012:

CTTTATGGGA TACACTACAA ATCGAGACTA TAAGGTTTTT TATTTTATTT ATTATTACAT 60  
 5 TATCAATAGT TTTATAATCG AGCTTCAAAA CTTTAGAAAA TAGTAGAAAT AGCATTCAAT 120  
 ATAGTGCAAA AGTGCAAATT GATAACTTGA CACTTATCTC CTATAAACCG TACAATTAAT 180  
 TTGTATGATT TATATATAAT TTCATAAAGT CATATTGAAT TTCATATAAA GAGCAAACCC 240  
 10 TAGAAAAaGA GGTGTTGTGG AATTATTAAG CTCCTACTCA TTGCGGGGT CATCTAGGGT 300  
 GTGGAGGATG TGTGCCGAAT TGTGCTCAAA nATCCCAGCA GCAACGCGAG TTGAACAGCC 360  
 TAAGACGCAA CAAAGGATCT GnnAAGGACC ATCAGGCACG 400

(2) INFORMATION FOR SEQ ID NO: 1013:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 353 base pairs  
 (B) TYPE: nucleic acid  
 20 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1013:

GTCGTTGCTG ATACCACGCC AGTATTGGTT TTAAATGATA AAAAAATCTG TGAGATTGCA 60  
 TCATTGAGAC AAACATCGCT ATTTGAAATG GCCGAATATA TAGGGTTTAG CGAGCCACAG 120  
 30 AAATTAGTAC AATTATTTAT TAACCATGAT AGGAAGGTGA GACGCCAATG AATCAATATA 180  
 ATACTATAGG TTTTCACCCG GGAAATAGTC GTATTCTATCA ATTAAATGCG ACTGTTAAAC 240  
 TTTTATnCTT ATTAGTTGTT CTATTCTGCA ATGGTnCTAT GCACAGGTAT TnATTTAATT 300  
 35 AGGCTCACAT TTATGGGCAA TTCTCAATGA TGAACAGTCG TTGTGTAATC TCG 353

(2) INFORMATION FOR SEQ ID NO: 1014:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 627 base pairs  
 (B) TYPE: nucleic acid  
 40 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1014:

CAAAGCCTTC AACAAATAAT CTTTATTAG TACTGATTGG TTGCACAACA TAAGTTACAC 60  
 CAGGTTTCATC TTAAATGTA ACTTCCTTAT AGAAGAGACC TTTTTTAGCA CTATACTCTG 120  
 50 TTTTCTCTGA TTTAATTTTA TCTTTTAGAT TTTTCTCTTC CAAGTAACTG TCAATTAGTT 180

55

ATGAAATAAA TAATATAATG ATAACTTTAA TCGCGTTTTt TTTCTTCTTC ATTATGTAAC 300  
 TCCTTTTTGC TTATCTATTc AGTATGAACG AATCAATTTA TTTAATAAAG AGTTTTTACC 360  
 5 AGATTGTAAC AAATTTTTTTT ATTCTCAATA TTATTATAGA AATCGAATTA CATACACGAT 420  
 GCTTTTAAAA AATTTAATAA CAAATTTTAT TTTACTATCT ATCAAAATAA TTGACTACIT 480  
 TTAACAATTA AGGATGATAC AATTACATTT TTTTCAATTT AAAAAATCAG TCATATCAGT 540  
 10 AATTACCGAT GAAAATACTA AGATATCGAT ATATTTTGCA TTATTTAACA TTTAAATTCh 600  
 ATTATAGACA ATTCAATAAT TCGGATG 627

(2) INFORMATION FOR SEQ ID NO: 1015:

15 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 462 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1015:

25 TAGTGTGACA TTAACACTGG AACAAAAAGA AGCTGCAATT GCAGAAGTTA ATAAGCTTAA 60  
 ACAACAAGCA ATTGATCATG TTAACAATGC ACCTGATGTT CATTCAGTTG AAGAAATTCA 120  
 ACAACAAGAA CAAGCGCATA TTGAACAATT TAATCCAGAA CAATTTACGA TTGAACAAGC 180  
 30 AAAATCAAAT GCAATTAAAT CGATTGAAGA TGCAATTCAA CATATGATTG ATGAAATCAA 240  
 AGCTCGTACT GATCTAACAG ATAAAGAGAA GCAAGAAGCT ATTGCTAAGT TAAATCAATT 300  
 AAAAGAACAA GCAATTCAAG CGATTCAACG TCGCAAAGC ATCGATGAAA TAAGTGAGCA 360  
 35 ATTGGAACAA TTAAAGCTC AAATGAAAGC AGCTAATCCA ACAGCAAAAG AACTAGCTAA 420  
 ACGCAAGCAA GAAGCTATTA GTAGAATTAA AGACTTTTCA AA 462

(2) INFORMATION FOR SEQ ID NO: 1016:

40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 235 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1016:

50 TGATTGGTCC CATCGACTCG TTATAACAAA TTGAAGGTAC AAAAGTATCT TGTGATTAA 60  
 TAAATTCAAG TAAATTCGTA CCTGGTTCTA CAAGGTAATT CTTTCCATC AAGTGAACC 120

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ATAAATTGCG CATATCCACC nAAAAATAACG ATGCCCCACA CATCTTTCAG ATAGG

235

(2) INFORMATION FOR SEQ ID NO: 1017:

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- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 227 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1017:

15 GTTGAAAACCT ATAAGATCA<sub>n</sub> ATAAAGGTAA AACAGTGGTT TGTGTCATTA GTGGTGGTAA 60  
 TAATGATATT AATCGAATGA AAGAAATTGA AGAACGTTCA TTACTATACG AGGAAATGAA 120  
 GCATTACTTT ATCTTAAATT TCCCTCAACG TCCAGGTGCA TTGAGAGAAT TTGTAAATGA 180  
 20 CGTATTAGGA CCTCAAGACG ATATTACTAA ATTTGAATAC TTAAAAAT 227

(2) INFORMATION FOR SEQ ID NO: 1018:

25

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 284 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1018:

GTCTTACTTG CACAAGGTAT TATTTCTATC TTACTCGTTG CTTTCGCAAT CATGCTATAT 60  
 ATCATTAATA TTTTAGATGC ATATCGTAAT GCTGAACGAT TTAATCGCAA TGAGGAAATA 120  
 35 AAGGATCCGA AGCGCGTATG GTGGCACATG GGACAAGACG TTCCCATACT TACTAATCTC 180  
 ACCAGGTACA TnCTTATTGA TATTGTAGTG TAATTCCATT ATATTATGTT GGAGTAGCAT 240  
 40 TACAATACAA TTATACACGC GCCTCGAGAC nACATAGATG GGTG 284

(2) INFORMATION FOR SEQ ID NO: 1019:

45

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 779 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1019:

CAATCATCAC ACATAAATGT TCGAATAGGA TTGTTTTTAA GTCGTTTAGA CTCAGTTGTG 60

55

CACCTCAATA TGAGTTACAT GGTGATTG ATATGAATAA CCATCTTCTT GATTGTAAAT 180  
 AAAACTATCT ACACCATTAT CGCTGTAAAG TCGTTTACCG TCTTTTGCAA ATTGGAAAAA 240  
 5 TAAATAGGGT AATAGATCTA TCGGTATATC TAAATGATCA TGCTCATTTG ATAATCGAAT 300  
 AGTAGTTGCA GAGTCATGTG GTTCGGAATG TTTGAAAAAT GGTGTCATAT TAATGACAAA 360  
 TGAACCTTCT AACATGGCAC GTTTTTTATA TTTTATTTCT GAATTTAAAG TAGGCGGATT 420  
 10 AGTTTGTCTT TCTAGGATAG CaCGATTCCa TTCaTGaTTA TCTTCAAAGT CGATTGGTTT 480  
 TGAACCATCa AATACACCTT TTTCTAAATC TTCGATGCTA ACTTTTCTAT CATCGAAAAT 540  
 CCAAGTCGTA CTATCTAATG TTATAGGAAA CTTTACGGCT CCTTTAATTT GTATCATTTT 600  
 15 CCCACTCCCT ATCAATGTAT ATAGCATTAT TTTAACACAA ATTGCTAACG ACACATTTTA 660  
 AATCTACTTG CTTTTTAATA TTTAGTAAGA TAAACTTTTA GTAAGACTTG AGAATTTATA 720  
 TAGAGGGGGA GCGTGTGATG GCGAAACAAG CAACAATGAA AAATGCAGCT TTGAAACAA 779

(2) INFORMATION FOR SEQ ID NO: 1020:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 950 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1020:

TTAATGGTCC ATTAAGAATA ATGGCAGAAA ACCGTTTGCA TAAATCAAAC CTTGATTCAC 60  
 TAACTTAAGT AATACTCGCT TTTCTTAAAT CCTTTAGAAA GGAACATAT ATCATGATTA 120  
 35 CTTCAATCAG ACATTCTGAA GATATAGATA AACATATTAT AAAAACACCA TTAGATCATA 180  
 CAGCGTCATG GATTAATGTA GTAGAnCCAG ACCGAGAAGA AATTGAAAAT CTTATGGAAC 240  
 40 AATATAATAT ACCTGAAGAC TTTATACGTG ACCCTTTGGA CTCAGAAGAA AGTTCCTGTA 300  
 TTGAATATGA CGAAGATACT GGTTACTCAT TAATCATTAT TGATTTACCT ATCGTCAATT 360  
 CAACTAATCG TAGCGTTCTA TCTTTTGTA CGATTCCATT AGGCATTATT ATTGGCAACG 420  
 45 GTATTATCGT AACAGTTTGT GACGCTGAAA ATGAATTTTT AGAAAATTTA CCTAAGCGTG 480  
 ATATTAATTT AAAATTTTAC AGCAGATTTG CATTAGAAAT TTAACTACT ATTGCCGACC 540  
 ATTATAATCG TAACTTACGA TTACTTAATA AAAGTAGAAT TCGTATTGAG AAAGAACATA 600  
 50 AAAATAACAT TACTAACAAA CAACTTTTCA AATTAATGGA AGTTGAAAAA AGTTTAGTAT 660  
 ACTTTTtagc TGCCTtAAAA GGTAACGATA CAATTATTAA AAAGTTATTC CGTTTACCTG 720

AAGCCATCGA AACAAACAGAA TTACATCAAC GTATCTTAGA AAGTATCACA ACATCATACG 840  
 CTTCCCTTATT ATCTAATGAT ATGAATACGA TTATGAAGAC ATTAACACTT TTCACGGTAC 900  
 5 TATTAACgTT ACCAAyActC GTATTTAGTT TCTTCGGTAT GAATGTGTCG 950

(2) INFORMATION FOR SEQ ID NO: 1021:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1021:

AATATATAAA ATGAATACAT TGTGAGGCAA TTATCAAATG AAATTTAATA AAGTAAACT 60  
 20 AGTTATACAT GCGTGTGTAC TATTATTTAT CATTATTCT ATAGCGTTAA TTTTTCATCG 120  
 ATTACAGACG AAGACACATT CTATAGACCC AATACATAAG GAAACAAAAT TATCAGACAA 180  
 TGAAAAATAT TAGTGATC GTAATAAGGA AAAGGTTGCG CCGTCTAAAC TAAAAGAGGT 240  
 25 ATATAATAGC AAGGATCCTA AATATAAGAA AATTGACAAG TATTACAAA GTTCATTATT 300  
 TAACGGTTCA GTAGCTATAT ATGAAAATGG CAAATTGAAA aTGAGTAAaG GTtATGGaTA 360  
 TCAAGaTTTT GAAAAAGGTa TTAAAAaCAC ACCGAaTACG aTGTTTTtAA TnGGTTCAGC 420  
 30 TCAAAAATTT TCAACAGGGT TACTGTATAA ACAGTTAGAA GAAGAACATA AAATAAATAT 480  
 CAATGATCCA GTAAGTAAAT ACCTTCCATG GTTTAAAACA TCTAAGCC 528

(2) INFORMATION FOR SEQ ID NO: 1022:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 713 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1022:

GCATThCGGT TAAAgTAKGt TTCAGCTTCT CTCaTTTTAG AAGTACCGaA AAtTGGTTGG 60  
 45 TTAtCTGGAT TTAATrTcAC GATAAATATT GCTTACTTTG TTACTTTGTt AAATGTACCC 120  
 ATTACGAGTC TCAATGTTAT TCCAATAAAT ATCACTTGTT GGTGCATGGT TTGGATATGC 180  
 50 ACAATGATTT CTTGAAATTG TTTGAACGAT TTCTAATGGA TCACAGCCAA ATGTACTGTT 240  
 TAATACTTCA GAGTCTCTGA ATAATGCACA AAnTGAAATA CAAGTTGTCC AGTTTGGTAA 300

AGTATCTTGC GTATAACCAG CCTCTATACG AACCATTTTA AATTTTGTTC GAATTAAATC 420  
 TGTAAGACTC TGTCTATCCA TTCTGTTATC TACCTTTCTG TTTGGGGAAT TTTATCCGGA 480  
 5 CACAAGAAAT TGCAATAATA CACATTTCTT GAAACACAGA TTACATCTTA ATATATTTTT 540  
 AATAAAATGA AAAGAGTCAA TTTACATTT GTATTAAAT TTGATCAAGT CAACAAGAGT 600  
 TAAGTTTACT TTATAATGAA GCGAAAGTAA ATGAAGTAAA ATTTTATGCA TAATCACTAG 660  
 10 ATTTGATAAA ACTTACACTT TTATAATGAT ATCAAATTTA CAAAGGAAAA CTG 713

(2) INFORMATION FOR SEQ ID NO: 1023:

15 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 570 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1023:

AATAAAATAG AAATGATTAT GGGTACAATT ATCGCTATCA TATCCTTGTT ATTAATTATA 60  
 25 TTACAAGCAT TTAATATTAC TTGGGGCGTT ATACCAATTA CAAATTTTGG ACATCAATTT 120  
 TTCTTTTTCa TTGGTATTAT TTTAGTAATT GCCGGCATAT TTTwyAAGCG ACTtGAGTTT 180  
 TCGGGaATcG GGTATTATT TTGTcAAAA ACCGTCGATG CAATGATTCA TAATCCACAA 240  
 30 TCAGCCCAGA TTTTTCATT AATTATATGG ATATTATTAG TAGTTCTAGT TATATATTTC 300  
 ACAATTAGAT TATCTTCACG TACAAGATT TAAATATGAT AAAACTATTC ACTTGaTTAA 360  
 TTGTATTAAAT TGAaGATGaAT AGTTTTTTTA TTGTTGGAAT AACTTTTGGT AATTTATAAA 420  
 35 TAATTTAAAA AAATTGTTTA TAAAGGAAG CGTATATAGA ATGAAGGTTG GGTATATAGT 480  
 TTATTGAGGG AGGTGTCACA ATGAATAAAG TCACAaTTAA TCCTCAAATC CAATTAACCTT 540  
 40 ATCAAATTGA AGGTAAAGGG GATCCTATAn 570

(2) INFORMATION FOR SEQ ID NO: 1024:

45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 487 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1024:

CTTTGTTGTG CTTGAGCATT ATTAAAAAGA GTATTTAAAT TTAGTTGTTG GTTTGTAATA 60  
 55

TCAGAATTAT TAACACTATA TTTCCCTTTA AATAATGGTG ATTcGrAATA ATGCTTATCT 180  
 TTATCTGCAG CTAACGGAA TTKCCCTAAT GCAGAGTCTG CGATTGTTGG TTCAAGATTA 240  
 5 ATCATTGATT TCTCTTTTTT AGGATCATGT CCATATGACA tGTaATTTTC GATGCATTAA 300  
 CAACAGATTT AkGAATGCCA AGCCCTTTAA CAATTCATC TGATGCATCT GCGCTTAATn 360  
 CTAATGAAGA TAAAAACGAt TAtCTTTCAT CkkTTCTTGG AACTTCACTT CATTTTCAAA 420  
 10 ACGGTCATTA AAATAATCTT TATACATTTT TGCTGTTTGT TGTTCACTTT TTAGGTATGT 480  
 ATTTTTC 487

15 (2) INFORMATION FOR SEQ ID NO: 1025:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 364 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1025:

25 ATATGTTATA AACAAATTTA CAGTTGTATC ATCTACTCGT TCTATTCTCA TATCATCTCA 60  
 CTCCTTACAG TCGATGAATA GTATCCACAT TGTATTAAAG CATCAAACAA AATACAATTT 120  
 ATTTGTTTGA TTTCTTTCTC TAAAmTATTT TGGTAACTTA TAATAACATA TTCGTTGTAG 180  
 30 CAAAACTATT TAAATGATTT ATACAGTTAA AGCATTAAAG CACTTTCTTA ATTTAATTTT 240  
 ACCTTATCAT AGCAAATGTT TCATCCAAAA CACTCTAATA TAGAGCTATA TTAACAATTG 300  
 CACATTTGaT TAAAAAGATA CTAAGCAATT ATTGtAAAAT TAAAACCAA AAaGCAACAC 360  
 35 TATA 364

(2) INFORMATION FOR SEQ ID NO: 1026:

- 40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 333 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1026:

50 TGCCCCAGGG GAGTAcnAAA AAAAAGnGGG GTGGGGAATT GGAAACCGGA ATTAGTGGTT 60  
 AAAGGGGTTT ATTGGATGTT GGGTCTAAAG TATTCCCAGA AATTTATCCA TCnATGATTG 120  
 CTTTAGCCAA GTTTTTTTCC AACCCATCTT TATGGAATTT AGTTATCTCA ATTACATTAA 180

55



CTTATATAAA AATGGCACAA TTATTCATG TACCAACAAG AACAAATATTA ATACGTCATT 300  
 TAACACCTAA AATTATACCG GCTATTATCG TTG 333

5 (2) INFORMATION FOR SEQ ID NO: 1027:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 450 base pairs  
 (B) TYPE: nucleic acid  
 10 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1027:

TGTTCCATTC GTTTTAATAA TGGTGATACT GTACCAAGTAT CGAGTGCTAA TTCAGTTACG 60  
 ACTTTCCTGA CGTTTACAGG AGATTCATCC CATAAAATTG TTAAGACAAG AAATTGTGGG 120  
 20 TATGTTAGAT TGTACTTCTT AAAAAGTTTG TTAGAGTAGT AGCGATTAAAC TTGTCTTTGA 180  
 GCATTGTACA AACTAAAGCA TAGCTGTTCT TTAAATTAT GTTGATCAGA CATTAAAGTT 240  
 CTCCTCCAGA CATACTATCC GTTTTnTCT CTTTTCGGAT TGTAATCAT TAAAAAGTTG 300  
 25 ATTGTTTATT AATTCACAAC TTTCTTTGAT TCAATGCCAT GcAAAAATTA AAGTATGTTT 360  
 AAAGTTTAGA AGATATTTTT GATTAAATCA AGCAAAAAGA TAATTTAATA TATATGTGAT 420  
 CATTTTTAAA AATAACTGTn ATAGAAAAGA 450

30 (2) INFORMATION FOR SEQ ID NO: 1028:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 535 base pairs  
 35 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1028:

TGCATCTATA CCTAGAACTT TAATTTCGGA TTTTATTGCG TCTGTAATAT CTTTAATACC 60  
 ACTTTCGATA GGGAACTTT CGTCACCTTC AACATATTTA ATACCAAAGC CACCACCAAG 120  
 45 GTTTAATAAT TCAACTTGAA TGCCTTGctC TTtaAGCCAA CGTAAAmCAA TTTTAGCaGT 180  
 TTCAATAAAat GCTTCTGTAC CTTCAatCTG TGrACCaATA TGACAATGTA CACCTTTTAA 240  
 TTTTAAGTGT TTAGATTGTT GGACTTTGTC AATTGCTTTT TTAGCTAAGC CATATTGaAT 300  
 50 TGaTAATCCA AACTTACTAT CTTCTTGCCC AGTTTGaATA AATTCgTGTG TATGTGCTTC 360  
 aACACCTGGa TTAATCGTA AtACAACCTG aACCGTATCA TTAGCATAGC GGTCTATTAA 420

55

AATTTTCATGT TTCGTTTTAT TGTTACCATG GAAATGCATG CGACTCGGTT CAAAA

535

(2) INFORMATION FOR SEQ ID NO: 1029:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 359 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1029:

|                                                                    |     |
|--------------------------------------------------------------------|-----|
| GAAGATGATT GAATTATGGA ATTTTTTTTCG AGATATGTTA TTTCGGGGAT CAGATTTTGC | 60  |
| GATTTTGCCT TGGATAGAGT AGTTGCGATT TGTAATACG TTTTTCAGGT TCGATTCAAT   | 120 |
| TTCGTTGTTA AGATAATATG GATTAGTTTC ACTGACATGT TGATGCATGT CTTTTTTGTT  | 180 |
| CTGATAAAGT ATAAAATGTT TACTTAACAT TACTTAGTAT GACACCTGCT AATTCAAACA  | 240 |
| TTATTTGAGA CATTCTTTTC AAATTAATTA TAAATTTTTC CcATAGACT AGTTTGATAT   | 300 |
| TTATCTACAT CTCAAATTC TCATCAACAA TCTGTCACAT CCAACATTTT TACTThAGT    | 359 |

(2) INFORMATION FOR SEQ ID NO: 1030:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 341 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1030:

|                                                                   |     |
|-------------------------------------------------------------------|-----|
| TACATTGGTA AATAATTCTC ATAGTTTATG TCTCGTTGAT TAATCCAATC ATTGTTTTTA | 60  |
| TCGGGTAAAA CATTCAAAC TTTCAAATTC ACAATTGATT GATGTTTCAT TAAAGTATCT  | 120 |
| AATTTTGGCT CTCTAGTTAA ATATTCACCA ATGTCATTAT AATAGATATC GTGATTGTAA | 180 |
| CTTCCATCTT TAACTAAAAT AGATATAGCT ATCGGTGCTC TACTTCCTGA TCCAAATATT | 240 |
| TTTCCACCTT CTTTTCTTga TTTTTCACCC TGTGTTGCTT GGTGCGCTCT CAAATTAATT | 300 |
| ATGtACAGaT AGTTAAATTC ATCGaTAAAA CTTTTCTAAA T                     | 341 |

(2) INFORMATION FOR SEQ ID NO: 1031:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 326 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1031:

GTCTAACTTT AATGTTTAAA AAnCTTAGAA ATTTTCTACT CATAAATGGA TGCTTTATGG 60  
 5 AATATTATTA ACAGGCCCCAG CTTCAATGCT AGCTATAGAA TTTGGATGGT TCTTAACAGA 120  
 GATGGGTAGA CAGCCTTGGA TTGTTCTGTG TTATATGCGC GTGGCAGAAG CAGCAACACA 180  
 GCAGCGGAAT AACCTTCGTT ACAATTTTAT TTGGCATATG TACATCATTT AAGTATACAG 240  
 10 TGCAACGTAT ATCGTAGTTA AAATAACCGC GTAGAGAGTA ACGTAGCAGA GCAGAGGAAT 300  
 GAAAnATTAG CTTATGnAAC GGTAGG 326

(2) INFORMATION FOR SEQ ID NO: 1032:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1032:

ACAATCAGGC TTGTGAAGAA TGAATTGCAT GACGTTTGTG TAATTGAACT GCGAGGTTTA 60  
 ATTTCTAAAA TGCTCCAGnC CTCCAATGTA ATCGCATCTT GATATAACAT AGCGATCGCT 120  
 TGATTTGTCTG TTGTATCAAC ACCTCTAAAC AACGTTTCAC CTATTCGGCA ATTCATTTAT 180  
 30 TTTACCCAAA TCATTATATA AAAGTTGTGG TAACATGCTC GAAATACCAC CTGAAATAAT 240  
 nTCAATCGAT ATCCTATTTC TCT 263

(2) INFORMATION FOR SEQ ID NO: 1033:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1033:

TTTCTATAGA GGATCCTGTA GAGATGCAAA TTCCTGGTAT CGTCCAAATT AATGTGAATG 60  
 45 ATAAAGCTGG CATAAACTAT GTAAATTCGT TTAAAGCTAT TTAAAGATGT GATCCTGATG 120  
 TTATTTTAAAT AGGTGAAATC AGAGATAAAG ATGTTGCCAA GTGTGTTATA CAGGCTAGTT 180  
 50 TAAGTGGTCA CCTTGTTCTG ACTACATTGC ATGCAACTGA TTGTAAAGGT GCTATTTTAA 240  
 GGCTATTAGA AATGGGCATT TCTGTACAAG AATTGATACA GGCAACTAAC TTAATTATAA 300

AGCAACAAC T CCGATATTTT TTTTCCCaTa ATCATtCATT ACCATCATCA TTTAAGAACT 420  
 TAGAAGATAA ACTTGATGAT ATGACAAAAG CAGGTGTCAT TTGTGAAACT ACAATGCATA 480  
 5 AATACATTTA AACTACATTC TAAGAAGCGA CAAT 514

(2) INFORMATION FOR SEQ ID NO: 1034:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 598 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1034:

TTTTTCACGA ACATTTTTGT TTAAAATTTT CTTTCTTAAA CGTATACTTT CTGGTGTAAC 60  
 20 CTCAACAAGT TCATCATCAT TAATGAATTG TAACGCTTCT TCCAATGTTA GAATACGCGG 120  
 TCTATTCATT GTTTGTGTTT GGTCTTTCGT TGCAGAACGT ACGTTAGTTT GATGTTTTGT 180  
 TTTAGTGATG TTAACAGTTA AATCATTTTC ACGATTATGT TCACCAACAA TCATACCTTC 240  
 25 ATAAACTTCA GTACCAGGTT CCATGAAGTT TACACCTCTA TCTTCAAGTC CCAAAATGGc 300  
 ATAAGTACTT GCAGAACCTT GATCCATTGA AATTAATGCA CCATTACGAC GACCGCCAAT 360  
 TTGTGCTTTA ATACGTGGTC TAAATTCyTC aAATGTATGG TTAATAATAC CGTAACCTCT 420  
 30 TGTCAATTGAC ATAAATTCAG TCGTATAACC AATCATACCA CGAGCCGGTA CATTAAAGAT 480  
 TAAACGTGTA AGTCCATTAT CAGTTGTAGT CaTATCAACC ATTTACCTT TaCGTGcACC 540  
 TAAkGATTCa ATAACAGCAC CTGcATTTtC TTGTGGCACT TCACATTGCA CACGTTCA 598

(2) INFORMATION FOR SEQ ID NO: 1035:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1035:

AAACAGTGCT TCATTATCGG TATTGATATT GATCCACAAG CCGTTGACCT AGGGCGCACA 60  
 ATCGTTAACG TCCTAGCAC AAATGAAGAT ATAACAATTA CGGATCAAAA GGTATCTGAA 120  
 50 CTTAAAGATA TCAAAGATGT GACGCATATC ATATTCAGCT CGACAATTCC TTAAAGTACC 180  
 AGCATTTAGA AGGAATTATA TGAhTTAACC AATGAAAATG TCCGTAGTGC CATGCGCCTT 240

AAGTGGGCCA TGT

313

## (2) INFORMATION FOR SEQ ID NO: 1036:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 235 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1036:

AATAATGAGT AGGTTTTGAT TACTTACGAG ATAACATGGT GAATTATTCT GAAGATAGAC 60  
TAATGCGTCC ATTACATTTT GCAATCATTG ATGAGGTTGA CTCAATTTTA AATCnACGAG 120  
GnCGACGCCA TTAATTATTT CTGGTGAAC TAAAAGTCAA CGTCACTTTA TACACAAGCA 180  
AATGTTTTTTG CGAAAATGTT AAAACAGGAC GAAGATTATA AATACGATGA AAAAC 235

## (2) INFORMATION FOR SEQ ID NO: 1037:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 263 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1037:

nCAATATACC TCCTATCATC ACACAAAATG CGTTGTTTCG TATGATTTTC TCAACATCGT 60  
AGACTAATGC AATCAGACAC AACACCATGC TCTATATCCA ATATTTGCTT TATTGCCTAT 120  
CAATGAGCGT ACTGCGTGCT TTAAATAAT CATCATCAAT TAATGACTGT ACAGGCACCT 180  
CATGAAAATT ATCATCCGCC AAGTATTGCG CACGATCACT ATATGCTAAA TGCATCGCTT 240  
GTATCAnATG ATGCAAGTAA TCA 263

## (2) INFORMATION FOR SEQ ID NO: 1038:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 218 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1038:

ATTGTACCTG GCACAATCTC ATTATGTATT GGATTATCAT CATTACGAGC GCCAAATATT 60

ACCGTTATGA CATGTTGATC ATTTTtAGTn AATGTTAAAG CTATAACGTG TGATATTGCG 180  
 AGTCTGTCGG CATTCAATAT CTTChAAATG CCCTACAT 218

5 (2) INFORMATION FOR SEQ ID NO: 1039:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 396 base pairs  
 (B) TYPE: nucleic acid  
 10 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1039:

GTTTAGACGC TAATGnTGGC ATATATTACT TGCCATGCAA ATGAGTCATA AGGCATAGTT 60  
 TTCAAGAAGG GTTCTGACAA TGAAGTGAGC AACATGTCAT GATGAGAAGC AGGACTATAC 120  
 20 AATGAGAATA ACCTTTTGAT TTTTCATGCA TAAGGCGATT CAATCAAAAG CAATCACCTT 180  
 CCAACTGAAT TGTCATTTTG TAAAATAAAA TAATCGATCC AATCGTTATC TAATTCATAA 240  
 ATGTGTAAAC ACATACGTTA TGAATGGATA ACGATTTTtT GTTATGTTAA AGTGGTACAT 300  
 25 TAATCATGTA TTTCGTATGA TAATTAACGA CAAGTGTAAAT GGTtAAATGT ATTTTATGGA 360  
 TGGAAATGCh ATAATAGGCC TGGGTtACCA TGgnGC 396

30 (2) INFORMATION FOR SEQ ID NO: 1040:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1040:

40 AGCATTtTGT TtAAAAGCTG ATGAAGCAAT AATAAACTCT TCATATCCTC TGTCCATTAC 60  
 AATTTGACCT TGATATACAA TTTCTTTAAA GTTTTCGATT TCTTTAAATT CTCTGCTATC 120  
 ATTTAAAATA GGTGCATTtG TAATAACATT CGCTTCCTTC TTATATCCTT TAGATTGATA 180  
 45 ATATTCTTTT GCTGCGATGAC TtACTGTTAC GAAGGCATTA ACACGATGTT TtACTATGTG 240  
 TTTTtCTATA CTTTCTACAA ACTTTGAAAT AAGTGGAAct TTATTAAATAA AGGCATTTTt 300  
 CGCATATATt' TCATGCGCAT CATAAACAAt ATTAGCTTTT TtATAATTGC TtAAATAGAC 360  
 50 CATTAAATAAT ACGTCGAAAT CATTtGCATG AATCACGTCA 400

(2) INFORMATION FOR SEQ ID NO: 1041:

55

(A) LENGTH: 268 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1041:

10 ACTTGCGTTT CTATTAGCT CAGACAGGAA AAATATTCGC TGGAAATATG TAGGAATTTT 60  
 ACITGCAATT CAGCTTATCT TTGCATTTAT CTTGCTTAAA ACTACAATGG GAATCAAGGT 120  
 TATTGGTGGT ATTTCAAACG GTTTTAACTA CTTATTATTA AAAGCAGCAG ATGGTGTTAA 180  
 15 CTTTGTATTC GGTGGTATTC AATATATCGT CCCTAAGCAC CCACCCATTC CTCCTCCGGG 240  
 GAATAATAAC CAACnGAATT AATTCCGn 268

(2) INFORMATION FOR SEQ ID NO: 1042:

20

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 277 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1042:

30 GTGAAGATAA GAAATTAAAG TTAAGACAAG GTTAAAAATA AGCAAAAAAT ATTGAAATTA 60  
 CAGATCATTG GAnTGGTATT CCAGAGGAAG ATCAAGATTC ATTTTGTATC GCTTTTATCG 120  
 ATGGATTAAA TCTCGTCAA GAAGTCAAGC GGTAATGGAC TCGATTATCT ATTGCTCAAA 180  
 35 AAATCATCAA TTAAACGGnG ATCGATTAAA ATTAAAGTGA ATTAACAAGG AGCAACGTTA 240  
 AATCTATTTT AATCAGACTG AGACGTCATC AAGTCAT 277

(2) INFORMATION FOR SEQ ID NO: 1043:

40

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 379 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1043:

50 TTATCATCAC AAGTGATTTT GAAAATAAAA AAATCGAAGA TGATGACAAT GATTGAGGTA 60  
 GTGTGCCGAT ATTGCCGTTT ATTAAACGAG ACAAGCATA TCAAATTATC CAGAAATTTAG 120  
 TACCAGATTT ATCTTATCAA CAAGTTAATG AAGGTATGCC TTTGTCAGGn TTCCACAGAC 180

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AACCATTATT ATTGTTATTA CCGATATAAC CATAGTCATA TGGTTATTGT GATCCAAGGT 300  
 ACCTTATGTC AACAGCGGGT TAAAGCAGAG ACAATACATC AGATTCGGCA TGAACGAAAT 360  
 5 TATATTTAA<sub>n</sub> GCT<sub>n</sub>CTAAG 379

## (2) INFORMATION FOR SEQ ID NO: 1044:

10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1044:

ATATTGAACT TGAAGACCAT GCAGATATAA ATGAAATAAC ATATCGATTA TCAAAAATTT 60  
 20 TCGGTATTAA ATCTATTAGT CCAGTATTAA AAGTAGAAAA AACAATAGAG GCAATAAGTG 120  
 CAGGGACAAT TAAATTTGCG CCATT<sub>n</sub>TGAA GAAAACAGCA CATTTAAAT TGATGTGAAG 180  
 CGTGCCGATA AAAATTTCCC AATGGATACG TATGAATTAC AGCGTGAATT GGGTGGTGCA 240  
 25 GTATTGAAGC ACTTCGACAA TATTTCAAGT aATGTCaAAC GTCCAGATCA TGgAAATTCg 300  
 AGTGGGmAGT TtAGGmTTAG ATGCCAATTT TATATGGTAT GnAAGAAGTT GGTTCGGGG 360  
 30 TTCCAGGTGG GATTTACCnG TTGGGTACTG GTGGGTnAA 399

## (2) INFORMATION FOR SEQ ID NO: 1045:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1045:

AnGATAAACA GAGGAGCACA AAAATGAAT<sub>n</sub> nAAATATAAT CATCAAAAGT ATTGCGGCAT 60  
 45 TGACGATTTT AACATCAATA ACTGGTGTCG GCACAACAGT GGTGATGGT ATTCAACAAA 120  
 CAGCCAAAGC AGAAAATAGT GTGAAATTAA TTACCAACAC GAATGTTGCA CCATACAGTG 180  
 GTGTTACATG GATGGGCGCT GGAACAGGAT TTGTAGTTGG GAATCATACA ATCATTACCA 240  
 50 ATAAACATGT TACTTATCAC ATGAAAGTCG GTGATGAAAT CAAAGCACAT CCTAATGGTT 300  
 TTTATAATAA CCGTGGTGGA CTTTATAAAG TTAATAAGAT TGTAAGATTAT CCTGGTAAAG 360  
 AAGATATTGC GGTCGTACAA GTTGAAGAAA AATCAACGCA 400

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- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 626 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1046:

|                                                                    |     |
|--------------------------------------------------------------------|-----|
| ATAAACTTCT ACACCATCAT CTTTACCTAC AACATTTGTA GCTTTAACTT TTAGTCCAAA  | 60  |
| GTTATCTTTA AAGAATTGTT CACCTACTTT TTCAAATTCT TTACGATGCT TCTTCACAAA  | 120 |
| TTCAATCGCA TCTTTTTCTG CAGGTGGTTG AAAGCCTTGT CCTACATATT TTGAAGCTTC  | 180 |
| CATTTCTTCT GGTA CTGATT TTGTTTCTGT ATTTGTTTCT GTATTTGTTT CTGTATTGT  | 240 |
| GTCTTTTTTT GATTCATTAT TCATCGCTGA ACATCCTGAT AACAGTAGCG TTGCTATTAA  | 300 |
| GATTAATTTT GCCTTTTTTAA ACATAGCTCA TCACCCATTT ATGTGkTTAT ATAGAATATT | 360 |
| AAAAAGCATT TTA AAAAAA TTTATTCATC TTTACGATAC ACTCCATATT CTATTGGATC  | 420 |
| ATTATCATCA TAAAAGGCTT TTTTAGTATT AATAGTAGGC TTTCTATTT GAATTGTAAT   | 480 |
| TGTAGATTTT TCTGGCTTAT TTTTAAATTT ATATAGTTTA TCACTCAGTT CAATTACATC  | 540 |
| ATCAACTGTA TTGTCTTTAG TAAAATTTTC CTTTGTACTA AACAATGTTG TTACTGTATC  | 600 |
| TGTATTAGCA GCGnAATTCA CTTCTT                                       | 626 |

(2) INFORMATION FOR SEQ ID NO: 1047:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 317 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1047:

|                                                                    |     |
|--------------------------------------------------------------------|-----|
| GACGGCGTTC AAAATGCAAC GGTCAATTTA ACAACAGAGC AAGCTAAAGT TGA CTATTAT | 60  |
| CCTGAAGAAA CAGATGCTGA TAACTTGTC ACTCGCATTC AAAAATTAGG TATGACGCGT   | 120 |
| CTATTAAAGA TAACAATAAA GTCAACGTCA CGCAACTGAA GCGTACAACA TAAATTGATA  | 180 |
| GnTATCATAT CAGCAGTATA TCTTACCACT ATAATGTAAT GTTGACACTT TCATATGCAT  | 240 |
| ATACAGACTA TTACGATCAI GTCCATTAT TAGCnCACTG TCATTATATG GTGGCATTAT   | 300 |
| GAGGGTATAA ACTTAGn                                                 | 317 |

(2) INFORMATION FOR SEQ ID NO: 1048:

(A) LENGTH: 223 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1048:

10 ATACGnATTA TGCAAAAAAT AAAGTGAGAT TGGCATATGT GTAAATCTAA AATACTGTTG 60  
 AAAAATATTT TTAGTGAAGT AATCAGAAGT TAAAGATTTA ACTGAAGTAA AAATATAATC 120  
 AAGATTACGA GTCATTAAACA TTTAGCTTTA AAGAGGGAAA CATATCAAAG TAGGTTAGCT 180  
 15 AAGnAAAAACA CCGACTAAAT CGGGGATATT TCGTGACATG TTG 223

(2) INFORMATION FOR SEQ ID NO: 1049:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 608 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1049:

AAATATGAAT AATGCAATTG ACCAACGTTT GATAACGTTG CCATACCCAT ATTAAATTTT 60  
 30 GTATAACCTT GTTCTTTACT CCAAAGTAAC ATATGCAAGT ATAGACCATC CATTAATGGT 120  
 AAATCTAACT CTGGCAACCA TCTAATTTAA TCGACTGAAA TGGCATCATT AAAGTATGTT 180  
 GGCATTAAAC TACAAAATGC AATTACTTCA TTTTCTTCAT TTCGCATTAC ACCAATTGGC 240  
 35 GCTTTAGATA AGTATTCTTC ATTAAATnCA CCAACAGAGA AATGCATTTT CyGACGATTA 300  
 TCTAGCCaTA AATcACTTAC ATGTTGAAGt TCATTTAtAA ATTCAGTTGr AAACGGtGGt 360  
 TCAATAATTT CGAACGAAAT ATTAAGTTCA TCGAATThAT TTAAAGTCGC TCTAAATCCC 420  
 40 ACGGCGTTTT TTACCTGAAG TTGAAAATTG CGTTAAATCA ATAATTGCTT CTTACCTAA 480  
 TTTGAAAAAT TGGTTACCGG nATTATGATA TAAAGGCATG TGTGATCTG TAACTTGATA 540  
 45 GAATATAACA TCATAGCCTA AATACTCAGC GTAATTATAG AATGCTTCTA ACAATTCATC 600  
 AAAGGCAT 608

(2) INFORMATION FOR SEQ ID NO: 1050:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 292 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1050:

5 TGT TTTTCTA CGCTAAACTA TATGATAAAT TGCCTATGTA TTTACTGGTG TTTATGGCCT 60  
 TTACAGCTGT AATTTTGATT ATGATGTACA TACAAGAGAA AAATGAAAAT TACAAAGTTG 120  
 AAAAAAGATA TGTGGTTAGA TATCTCACAC TTAACGTTAT TGTGGGATAT ACTTTGCCAT 180  
 10 TGCTTTTGT ATCTATTTAC GTTTTTGGTG TAGTCGGTTT TGGATTTGAT GTTTTCAATT 240  
 ATTGTCTAGG TAKTATCTTG ATGTYATwTA TTTCTTGTT TAGGTnTATT nT 292

## (2) INFORMATION FOR SEQ ID NO: 1051:

15 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 734 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1051:

25 TAAATChTCA AAGATTTCTT CTAAACATT ATAATCTTCA ACGATACTCG AATAATAATA 60  
 CAGCTCATCA TTTCTGGGCT TGGTATAATA AAATATAACT TGCCACCTC CATCGTCCAC 120  
 ATATGCAATT ACATATACCT TTTCCCACTC TACTGGTATC ATTTTCATTGA TCTCATTTGC 180  
 AATTTTATTG TACATTTTCA TTAATTTTTC TTCGAAATTC ATGTTATCGC CTCTATTGTT 240  
 30 CAGCTTCTTC TTGCTCTTCA ACATATTGCT CGATTTCTTT AACTTTATTA ATTTTCATATT 300  
 CCGTTTCTGG TAAAATTCCA AATTTTCTAT ACTTATAGTA ATTTTGTCTGA CCTACTTGAC 360  
 CAAATTCTGA ATTTATCCAA TCAATATAAT CAAATGAAAC TTTTAATTCA CCTTCTCTTG 420  
 TAAAGTCAAA TTCGCATGAT GTCCATGGTT CATGTCCTTC TTCTTTAAAT AAATTCCTTA 480  
 AATTTTGAAA TTGTTTATAC AACTCATACA CTGAaTCCAT AAATCCGAT TCCGATATAT 540  
 40 CATATTTATT TAATACACTA GTATAGTAGT ATAATTCATT ACTTCCAGGT TCTGTGTAAT 600  
 AGTAGAACAC TTCTCCTCCT CCGTCATCTA TATATGCCAT TGCATATACC TTTTCCCACT 660  
 CTACCGGTAT CATGCTGCTA ATCTTATTCG CAATCTCGCT ATACATTTCa CTTAATTTTT 720  
 45 CTTCGAAAGT CATG 734

## (2) INFORMATION FOR SEQ ID NO: 1052:

50 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 775 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1052:

ATTTTAAACC AAAATTGCTT TTTTATCTGA AAAGAAAGGC AATGTTAATG TTTCTTCAAC 60  
 5 AATTGGTGCA ATCTCTGTTT CGTATAAATT ATATTTACACA AAGTTAAAGT CATCTCTATC 120  
 ACTTTTCAAA AATTGTGATA TGATTCTGC ACTTTGTTTT TCAACCAATT CAGGCACATc 180  
 TCCATAAATa GCTACAATAT TGTCGCTCAT TCATTACACC CTTTCATTCTG TTTGACACAT 240  
 10 CAATAGATTA TATCATGTTT CTGTATCTAT AAACCACTTG CATTTCATA AGAGCTTGAA 300  
 TCAACTTTTA AATTATCATC TAAGTCAATT GTAACCTGAC CGTTTtGTTG ACTATTGTAA 360  
 ATGCGtACTG CGAATCCTTT GCAATCGTTt aACAACTTCT ATATTAGGaA GwTGATACAT 420  
 15 ATTGTTCTTC CCAGAAGAAA TCAAACCTAT TTTAGGCTTA ATCATCTCTA TAAATTCTTT 480  
 AGAACTACTT GTCTTGCTCC CATGATGTCC TACTTTTAAA ATATCAATCT CCGGCAAGTT 540  
 20 ATATTTTTTT AGTAGTAAAG ATTCATTATT TTTACTAGCA TCGCCCATTA ATAAAACTTT 600  
 TTTATTTTGA TATGTAATCA TAGTAATAAT CGAATACTCA TTTTATCTC GGCTATTTGG 660  
 AATAAACTA TCAAAAAAAT AGAAACTAC TATCTCCAAG TTTAAACTA CTAACTTGTC 720  
 25 TTACATCCAT AAGTTTAAATG GTTGTACTTA TGGGCTTAAT TTCCGATAAT AACCA 775

## (2) INFORMATION FOR SEQ ID NO: 1053:

## (i) SEQUENCE CHARACTERISTICS:

30 (A) LENGTH: 234 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1053:

GAGACCAATC ATCATAATGA ACGACAATCA TGTATTTAAT ATTTAATAAA ATACTGAATA 60  
 40 ATGCTATAAC TGCCATTAAT TGAAGACCAA TCGCATCTAA TGCGACAACA CGATCGGCAA 120  
 GTGATGGGCC TAGCACAACG CGAATGAGCA TAGCTAACAT AGGAnGTGAC AACTATGATT 180  
 AATGCAATAA CGATGAATAA CCTTGATGAn TCATTATAAT TCGCCACCT CTCT 234

## (2) INFORMATION FOR SEQ ID NO: 1054:

## (i) SEQUENCE CHARACTERISTICS:

50 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

CTACTGGTAT CATCCACTGA TTTCATTTGC AATTTTCATTG TACATTTGAC TTAGCTTTTC 60  
 TTCGAAAGTC ATGTTATCGC CCCTATAGTT CAGCTTCATC TTGCTCTTTA ATATATTGCT 120  
 5 CGATTTCTTT AACTTCTTCC ATTTCTGTATT CCATTTCTGG TAAACACCA AACTTTTTAT 180  
 ACATATAATA GTTTTCACGG CCTAATTGAT CAAACTCTGT ATTTATCCAA TCAATATAAT 240  
 CAAATGAAAC TTTTAATTTA CCTTCGCTTG TAAAGTCAAA TTCACTTGAT GTCCATGGTT 300  
 10 CAAGCCCTTC TTCTTTAgAA AGTTTCTCTT AACTTCTTAA ACAATCTATA TAAATCCGTC 360  
 CACAAATCAT AAAATACTTT TTCAGAGACA TTATACTCTC 400

15 (2) INFORMATION FOR SEQ ID NO: 1055:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 333 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1055:

25 GnGGCATATA TAGCGTTGGC GGTATAACAA AGAAAAATGT GAGATCAGTG TTTGGATTG 60  
 TAAGTAATCC AAGTCTACAA GTTAAAAAAG TTGATGCTAA AAATGGCTTT TCGATAAACG 120  
 AGTTGTTTTT TATTCAAAAG GAAGAAGTAT CATGGAAGGA ACTGnACTTT AAAATAAGAA 180  
 30 AACTCTTAAT CGAAAAATAT AGATTGTATA AAGGAACGTC TGATAAAGGT AGAATTGTTA 240  
 TCAATATGAA AGACGAAAAG AAGCATGAAA TTGATTTAAG TGAAAAATTA AGTTTTGAAC 300  
 GTATGTTTGa TGTAATGGaT AGTAAGCAAA TTA 333

35 (2) INFORMATION FOR SEQ ID NO: 1056:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 347 base pairs  
 40 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1056:

TGGGCAGTTA CATTTATGAT TATCAGCACA TGTTAGCTT ATAAATTTT ACGAAAGTTT 60  
 AGCCGTTTAT AAAGCACATG CATAATGAAA CGAGTAATTG CCACTTGATT AGTACTICAT 120  
 50 TATTATGTCG AAAATAAAAA TAAGTGGTAT TTTTAATATA TTAAGAAGCA CTCATAATCG 180  
 GCTGTTAATT AATAATATTT TTCATAAGTA TTGATTCATC ATTTTCTTTA TGTTAAATAT 240

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TAATACAGAT ATCAATATGG CnAAAGTGTT nnATGAATCA GAGGTAA

347

(2) INFORMATION FOR SEQ ID NO: 1057:

- 5 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 312 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1057:

15 TCCAAACGG AGAGCCAAGA GTTAACTCTA CTTATATAGG ATACGCGCCA ATTGATGATC 60  
 CAAAATTAGC GTTTTCAATT GTATATACAA ATCAGCCTGT ACCACCACCA TGGTTAACAG 120  
 GTGGAGACTT AGGTAGAGAT GTAATTAACT ACTACTTTAA GCAGTTAGGT AAAGATGATA 180  
 20 AAAATAAAGA CAAAGACAAA TAAATTTTAA CCTGACCATT GTGTAGCGCA TGGTTGTAAA 240  
 ATTTTAACTT TGcMAATATT ATAGATGTTG GTATAATAAT AAAGTCGTAT TtAGaAATGA 300  
 TwAGGaGGGA AT 312

25 (2) INFORMATION FOR SEQ ID NO: 1058:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 404 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1058:

35 GCCATTTTGC GATGCTAAAT CCATTGAAAA TGCAATACCT GAAAGTCCAC CAAACAAAGA 60  
 ATTGTTATAT TGACCACTCT GTAAATATGG TGCTAATTTT ATGATGTACT TATGCACAAT 120  
 TTGCTCAGTA TTAATATCGA AAACTTTTtG AtAAGCATCT AAAAACAAAA TGATACCTGG 180  
 40 TATACCATGT GATAAAGTTG AAGGTTCAAA ATAATCGGTT TCAGTAGATG CTTTTGAAAT 240  
 GAAATCATCT ACTTCTGAAA TCTCTTGAAA CTTCTTCTTC AATATTAGAT TCATATCAAT 300  
 45 CATTTTtGTC ACCACACCAA TGCTTTTGAG TTTTAACAAT TTCITTTTACA ATAGATAAAA 360  
 CAAATGTTTC TTGATCCTTA TCAATGCCAA ATATTGATT GnAG 404

(2) INFORMATION FOR SEQ ID NO: 1059:

- 50 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 233 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1059:

5 ATGTACATAG GnATGACATA AGTGTGCCTT CTTTTTCAAG ACCCTCCATA GAAATAATAC 60  
 ATGGATGTGC ACCACGnTAC TACCTCTTTA ACGTTACCAG AATTGATAAA TTAACCTTCT 120  
 CTTGTGTTGC TAAACCTACA ACTGGTGTAC CTTCTTCGAT TAAGGCAATT GTACCATGTT 180  
 10 TAAGTTCTCC ACCAGCAAAA CCTCGCTGAA TGTAGAAATT CTTAAGTTTA AGT 233

## (2) INFORMATION FOR SEQ ID NO: 1060:

## (i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 295 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1060:

20 GCACCACTAC TGTTAATAAC ACACCTAAAA AAGTCGAAAT ATAAGGGTTA ATCGCTGTTT 60  
 TAAATGTATA TCCTAGTGCG ATTGCCATTA ATTATCCGAT AGCTTTTTCT GCTGCTTCCA 120  
 25 TAGTCATCTC ACCTAATGTT GGATGTGCAT GGATTGTTAA TCGGATATCT TCAGCATTCA 180  
 TACCAGCTTC AATTGCTAAA CCTAATCAG AGATAATATC TGATGCACCA GTACCAACTA 240  
 30 CTTGAGCACC GATTAAAGTA TCATCTTCTT TAGTGTAATA AGTTTAACAA ATCCG 295

## (2) INFORMATION FOR SEQ ID NO: 1061:

## (i) SEQUENCE CHARACTERISTICS:

35 (A) LENGTH: 413 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1061:

40 CAATGCCTCT CGTGTGTCAG CTTCTTCCGG TGAAAAACCA ATATTTTCAA GTGCAATAAT 60  
 TTGATCTAAG TCCTGCATGA TTACTTTTCT TAATACCATA AAAACACTTC CTTAGCCCTA 120  
 45 TATATCAAAA GTAATACCTT CATCTTTATA TTCATTATTT TCAAACTACC TCACTATAA 180  
 AAAACGAGTC TTTTATTGA AAGCCATTCT CCTTAATCAA TTAGACAAGT TGTATKATAC 240  
 50 GAATTAGTAA ATAATCATGA TTATAATTCA TTTTAAGCAT ACTCAAAAAG ACTGGTACAT 300  
 GTATACCACT CTAATTCGAA AAAATATATT TAGTTAAAAC CATTTCAAAA ACGACTTCAC 360

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## (2) INFORMATION FOR SEQ ID NO: 1062:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1062:

AAGCTGCATA CTCTCCAAAC TTAGAACCAC CGAAGCGATT CACAAAATAT TTATTAGCTA 60  
AAAAGTCGGC ACATAAAATT AATATTGTTA GCAATGCCAT AGATACATAA AACACCCATG 120  
ATAAATGCTG ATTATGAAAG CCAAATTGAT AGATTAAAAA GCCAACCCAT AATACTAAAA 180  
CAGAAGGAAT AATCGGCTTA ATCAACCCAA CAAATGCTAA CATGAAGGCA GCGATGATAA 240  
GTAGCCATAA AATAATTGTC ATGTTGATAT CACATCCTCT TTTGTATTTT TTGATTTTTA 300  
GTAAAGAATA TAAGTATCAT ACCTAACATG GTTGATGCTG CTGGATACCA AAAnATACAT 360  
TTTCCCAAAC CTTACCCAGT GGACTCCTAG GCACCACCTT 400

## (2) INFORMATION FOR SEQ ID NO: 1063:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1063:

TGGATCAGAA GGAATCTGGA TGCCTATTGA TGACAAAGGA TACTTTAATT TTGACTTCAA 60  
AACGAAACGT TTGATGATT TAGAGTTAAA GAAAAATGAT GAGATCTCAT TAACATTTCG 120  
ACCTGATGAC GAAGATGAGG CATTGAAGTC ATTAATTTTC AAAACTAAGG TAACGAGTTT 180  
AGAAGATATT GATAAAGCAG AACTAAATA TGACCATACT AAAGTGGAAA AAGTAAAAGT 240  
ATTGAAAGAT GTTAAAGAAG ATTTACATGT AGATGAAATT TACGGAAGCT TATATCATAC 300  
AGAAAAAGGT AAAGGTATTC TTGATAAAGA AGGTACTAAA GTaATTaAG GTAAGACTAA 360  
ATTCGCAAAT GCAGTTGTGA AGGTAGACTC TGAAGTAGGT 400

## (2) INFORMATION FOR SEQ ID NO: 1064:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 434 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1064:

5 GTGGTCGTGA AGCAACTGAT TTCAAAGAAG AAGATATCGA GCTTTTCAAA GACATTGCCG 60  
 ACAAAGTAAA ACAAACAAAT AGTTATGATC TAGCGTTTGA TGAATTAGAA AAAGAAAAAG 120  
 ACTTCCTGCA AGTCATTGTC AAAAACGATG AAAAAAATT ACCTACTAAT CAAAATGTCG 180  
 10 CTCAACTAGT AGAAGATTTA CGCCTAGAAA TCCAGAAAAT GCGCGAAGAA CGTCACCTAC 240  
 TTGGTCAAAT GATGAATCAA GTACATCAGC AACAACAAGA ATTAAGAGAA CTTCAAAATC 300  
 AACTTACATC TAAAATCGAT TCAAATAGCG AATCCTTAAA AGCCATCCAA ACATCACAAG 360  
 15 AGGCTATCCA AGAAGCGCAA GCCTCTCAAG CAAAAGCATT AGCTGAATCC ACCAATAAAG 420  
 TTGGAAGAA TGCT 434

## (2) INFORMATION FOR SEQ ID NO: 1065:

20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 239 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1065:

30 TAAACATAT GGCTTGATAT TGCAGAAGAA TTGAAGTTAT CGTACCAGAA ACGGTACATA 60  
 ATCATGATTA TATGGAACG AAAAAAATAA AAATGGGTCA TTTAATATAG GAGGATTTAA 120  
 CATTGAATTT TGAAGGTAAn TAATTGGAAG AGATTGGAAG TTGCATCGTT ATTATCGTTT 180  
 35 AATGATTTTA TCACTGGAAG ATTACTTGAA GGTGCAAAAG ATACnTTGAT TCGACATGA 239

## (2) INFORMATION FOR SEQ ID NO: 1066:

40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 202 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1066:

45 AAATATCTAT AGACCTTTAT TCGGAAATGG TTCGTCTCCA GAATGGAAGG ATGAAGTACC 60  
 50 GAGTATTGAA AGGTAGAAGG TCTCCAAACT TTACCTGnAC GTGCACGAnA TCTAACTGAA 120  
 GATGATTTAG CAATTGAATT GAAACAGCCA ATTGTCTGGTT GTAATAACTT AGGAGAGTTA 180

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## (2) INFORMATION FOR SEQ ID NO: 1067:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 749 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1067:

```

CTACAATTCG ATCAACGCCG AAGTTAGATA CACCGATTGC TTTAATTTTA CCATTTTCTT      60
TTAACTCTTC TAATGCACGC CATGAGCCAT ATACGTCATT GTAAGGTTGG TGAATAAGCA      120
CTAGATCAAG ATAGTCCAAA TTAAATCGTT GTAATGATCG TTCGATTGAT TTGATAGTAT      180
CTTCATAGTT AACATTTTCA ATCCATACCT TAGTCGTAAT GAATAGTTCA CTCTATCAA      240
TACCTGAAGC TTCAATACCT TGACCTACTT CAGTTTCATT TAAATAACTT TGTGCTGTAT      300
CAATATGTCT ATAACCCGCT TTAATTGCTT CTTTAACCGC TTCTGChGTT TGTTCTTGAG      360
GAATTTGAAA TACTCCGAAA CCTAATACTG GTATCTTTAC ATCTTTACTT ATTTCAATAT      420
GATTCATAAA ATGAACCTCC TTTATCTtGT ATGTCCACTA TAAACCATGG AGCGAACTCT      480
ATAGCAAGCC ATAGGTTTAC TTTCTCTCCC AAAGACGTTT AACATTGTCA TCATAATTAT      540
CACTAGCATT GATTTTAGCA ATATGATTAT CATAATTATC AATTTTATAT TGTAGTAAAT      600
CTCTCGCATC ATGAATTGTC TTTAAGTTTT CATTTAATTC TTCGAGTTGC TTATTTAAAA      660
TTTGCTTTTG CTGTGCTTGA ATATTTTCAT TTTTAGGCAA nTGCGCTAAC CTGCAAAATT      720
CGATAAGCGA TTCAATACTG ACGCCTGCA      749

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## (2) INFORMATION FOR SEQ ID NO: 1068:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1068:

```

TCCTCGAGAT AGACAAGAAT GGTGGTACAA TGTTTTTTAT GACGATGGCA AATATnATAA      60
GAAnATAA11 AAGAATGACA TGTCAAAAAT TAGGCGTAAT TTTTAGATTT ATCTATATAT      120
TTATGCCACC GCTCAAACCT TTATnAAAAG TAAAAAGACA ATATTTATAT TGAACCTGTG      180
ACGTGAATTT CTAAACACA ACCAACAATC CACAAGGAAA CTAGTAAATA AGTTTAAATA      240

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TACTGACTAA AAAGATTTTG AAAGTGATTA AGTATTTAAA ACACGCCAAT CTAAACCGC 360  
TATTGACAAA TATGAAGCGG AACCACCGTT GTnTTTCTTT TnCAGGTCCA ATTGAATAAA 420  
5 TGTGTGATGAA TAGAAT 436

(2) INFORMATION FOR SEQ ID NO: 1069:

(i) SEQUENCE CHARACTERISTICS:  
10 (A) LENGTH: 551 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1069:

TTCTCAAGTA ACAGGTATTA TTGTTACTGG TACAATCAAT AGAGAAAAAT ATGGCATTAA 60  
20 CTTTAACCAA GCACTTGAAA CTGGTGGCGT AATGCTAGGC AAAGATGTTA AATTCGAAGC 120  
ATCAGCTGAA TTCTCAATCT CAGAATAATC TCATTACACA ATCCTCATTG TTTAATATA 180  
TATACGAAAT GCCAACTATA TCATCCCTAG GTATAGTTGG CATTTTTCGT TTAACTCATG 240  
25 TGTAACAAGC ACTAACTGTT CACCCTAATT TTAGACGCCT TTCATTCAGG TAGGTCTTAT 300  
TGAAACTGAA AACTTTTGaTG ACCTTTTGcA AaGCCATTAA CTGTATAAAG CATAGATCCT 360  
CCGCCCATTT CTATATCATT GGAACAAATG ATGAGTTGAT TTGTTCCAGG TATAAATTGC 420  
30 GGATGAGTAG AACGTAACAT ATGCCCTTCA TCTCGGCTG GTATCAATAT TTGTCCTATT 480  
GGATAACCCC TTTTATTAAA AACTAACACT CGACCTTGA CCATACATTG CTACGGATAA 540  
ATTATCGGCA C 551

35 (2) INFORMATION FOR SEQ ID NO: 1070:

(i) SEQUENCE CHARACTERISTICS:  
40 (A) LENGTH: 325 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1070:

TATnATGGTA ACGCATGAnC CTGTTGCAGC ACGCTATGCA AATCGAGTAG TGATGCTAnA 60  
AGATGGTCAA ATTTTCACTG AATTATACCA AGGGGATGAC GATAAACATA CCTTTTCAA 120  
50 AGAAATAATA CGTGACAAA GTGTTTTAGG TGGCGTTAAT TATGACCTTT AACGAGATAA 180  
TATTTAAAAA TTTCCGTCAA AATTTATCAC ATTATGCCAT CTATCTTTTT TCGTTAATTA 240

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CAGAGTCATA TCCAATTATA CnGGC

325

## (2) INFORMATION FOR SEQ ID NO: 1071:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 771 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1071:

TAAATGCCGC AATTGGATAG CTTTAATATA ATTAATAGTC AAGGTATTnC CAACAAAnAAT 60  
 ATATTATCCA CCCGAAGGAA GCGGGGTATn TTTGTTACTG ACGTCCCACA AGAAGCACAn 120  
 ATATTAGATA GTGCTTACTC TGAAATTAAA AAATTAAGAG ATTATGATGA AAAACTAATT 180  
 ATCCCAGGAT TTTTGGCGT ATCTCATGAA GGATATATAG TTACATTTCC ACGTGGCGGA 240  
 TCAGATATAA CTGGCGCCAT CATATCAAGT GGTGTTAGAG CCACAATTTA TGAAAATTTTC 300  
 ACCGATGTGT CTGGTATTTA TAAAGCTAAT CCAAATATCA TCAAAGATCC TGAATTAATC 360  
 GAAGAAATCA CTTATCGAGA AATGCGTGAA TTATCTTATG CTGGTTTTAG TGTTTTCCAT 420  
 GATGAAGCCT TACAACCACT TTATAAAGAT CGCATCCCTG TGGTGATTAA AAATACGAAC 480  
 CGCCCTCAAG ATAAGGTAC ATTTATAGTG CATGATAGAG AAATAAATGC GAAAAATGTG 540  
 ATTAGCGGTA TAAGTTGTGA TAAAGATTTT ACCGTTATTA ATATCAAAAA GTATTTAATG 600  
 AATAGACAAG TCGGCTTTAC TAGAAAGATA TTAGGTGTCT TAGAGGATAA TAATATTTCA 660  
 TTTGATCATA TGCCTTCAGG TATTGATACT ATCAGTATCG TTATGCGTTC AAAACAAATT 720  
 CAAAATAAAG AAACAAAAGT ATTAAATGAA ATTCGTCAAA AATGTGATGT T 771

## (2) INFORMATION FOR SEQ ID NO: 1072:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 237 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1072:

CGGTGGATCC GTTTGATCTT GAGTGAGGTG CCAATGAAAG TTATGAGCCA CGTTGTGCGG 60  
 CGCACCATAT CGTAGCACCT AGTGATAATA ATAAGGAGGA ATTATAAGTG TTTGATCAAT 120  
 TAGATATTGT AGAAGAAAGA TACGAACAGT TAAATGAACT GTTAATGACC CAGATGTTGn 180

## (2) INFORMATION FOR SEQ ID NO: 1073:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 733 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1073:

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CTTCTTGTGA GGGCGTTACA TCACCGGATG GATGATTATG AACTGCGATG ATTGCATTGG      60
CATTCTCTCT CACCGCAATA CTAAAAATTT CACGTGGATG TACAATCGAA CTATTTAATG      120
TACCTTTAAA AACACAGGTT TCTTTAATCA CTACATTTTT TGAATTTAAC AATAAAATGA      180
CAAAATGTTT TTGTGTTAAA TCTTTCATTG TTGGAATCAT ATAATCAGCA ACATCACTTG      240
GTTGCGTTAT TtktATACGA TTATTTTCAG CTCTTCTCCC CATCCTTTCC CCTAACTCAA      300
ATGCTGCTTT TAAAGTAATT GCTTTTTGTA ATCCAATCCC TTAACTTTT ATCAAATCGT      360
TAATTGAAGA TTTTTTCAAT TCATTGAGAT TcGAAGCAGA TTAAAGCAGT TCATTACTAA      420
TGTCTATGCT CGAGAATCCT TTTCTTCCGG TGTTAATTAA TATAGCTAAT AATTCTGTAT      480
TCGAAAGACT TTTTGACCA TGGCTTAACA AACGTCTCT TGGCATTCT GAAGTTACCA      540
TTTCTTTAAT TTTCAAAAAT ATACGCCTCC TAAAAATTGA TGGATATCAT TATAAAAAAG      600
TGAATTGATA AAAAAGGArA TAAATATAAA TGAACAAGG GGTAATAGTT TAATCGGCTT      660
AAATATCATG GTAATTAAAG CAACTAAACC AGCAATGACA AATGTAAATA AnATGACATA      720
AATAGTGAAT TGG                                                    733

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## (2) INFORMATION FOR SEQ ID NO: 1074:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 768 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1074:

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ATGGTTATTT TTTATGCTCT AAATCGTATG TGTTTATAAG GTTCAATTTC TGCCATTAT      60
TAATTTTGCC GAGCAGTAAT GGGTTGTAA AGTATCCATC AATTATGCTT AGCAATATTG      120
AAAAATTTAA ATGAAAAAGC GGTTCATTTC TTGAAAAATA GTGTATATTT ACATTTTGGT      180
AATAACTAAC TATAATTTAC ATAAGGAGGT TGTCAATTGG TAGTATTGTT ATCTTATAGT      240

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TATTTACATA GAAGATCGAA ATGTGATTAT TGTAATTCGT CACTCAAaWG GTATGAATTA 360  
 ATGCCGATTA TTAGTTTTTTT ATTATTAAAA GGGCGATGTC GAAACTGTCG AAAGCGTATT 420  
 5 TCCCTAACAC ATTTCTTAGG GGAAACCTTT GCTTTAATAC CTATCGTCTT TATTAAGTAT 480  
 GATTTACAT ACGTAAATGt ACGCTATTTA TAACTACATA TGTTtTTCTG CTTATTTTTA 540  
 CTATGACCGA TATCACTTCT TTAATGTTAG ATTGTCGCTT AATTATAATT TATTGTATCG 600  
 10 TTTCTCTCTC GTTAAGTATG ATTTATCCAG TAGCTTTTAT CATTATTAGT ATGACCACGC 660  
 ATATATTCTA CTTTTTATTT CGGGCATATA TTGGTTATGG TGACGTTTTA CTAATATCTG 720  
 CACTTCTTTT GTTTTTCCCC TCTCCAATTC ACTATTTATG TCATTTTA 768  
 15

(2) INFORMATION FOR SEQ ID NO: 1075:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 20 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1075:

TCATATTCAT TAAAATACC ATTCATCTCA GCTTTTCTCA TTTTCTCTTT ATAAAGTTGT 60  
 ATTCGTGTC TTAATTCTGG CTCAGACATC TCACTCAATT TCTTCTGTTC CATCGGCAAT 120  
 30 ACCACTTTCT TCTAATTTAG CTTTAATTTT ATCATATTTA TATCCTTTTC TCATAAGGCC 180  
 TTCGATAGTT TTTGAAATTA ATTTCTGTTG CGTGTACTTC TTTGATTTT TATTATAAAT 240  
 TTTTCTAAA TCTCGTTGTA ATAAATCGTC TAAACCGCT TCATCTTGTG TAAAATCCAT 300  
 35 TTCATTCAAT ACAGCATGAA TGGTTTCCAT TTCAAACCCT TTTTGAATTA AAGATTGCAT 360  
 TACTTTTGCTn TnAACTnTAT TTTGTGGCCC nTTTTTTGTT 400

40 (2) INFORMATION FOR SEQ ID NO: 1076:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 753 base pairs  
 (B) TYPE: nucleic acid  
 45 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1076:

TTAGGTCAAA ATATGTTTTA TCCAAAAGGC ATTTTATCTC AATCTGCTGA AGCAAAGAGT 60  
 ACAACATATA ATGCAACTAT AGGTATGGCG ACAACAAAG ACGGAAAAAT GTTTGCATCA 120

55

CAAGGCATCG AAGAATTACG TGATTTATGG CAACAAAAA TGTTCGTGA CAATCCAGAG 240  
 CTATCAATCG ACAACATGTC ACTACCAATT GTTACGAATG CATTAAACACA TGGTTTATCT 300  
 5 TTAGTTGGCG ATTTATTTGT AAATCAAGGT GACACTATCT TGTACCAGA GCATAATTGG 360  
 GGTAATTACA AACTTGTTTT CAATACGAGA AATGGTGCAA ACCTTCAAAC ATATCCTATC 420  
 TTTGATAAAG ACGGGCATT TACTACTGAT TCACTTGTAG AAGCTTTACA ATCATACAAT 480  
 10 AAAGATAAAG TCATTATGAT TTAAATTAT CCTAATAaTC CGACAGGTTA CACACCTACG 540  
 CATAAAGAAG TGACTACCAT CGTCGATGCA ATTAAAGCAT TAGCTGATAA AGGTACAAAA 600  
 GTTATAGCTG TTGTGGATGA CGCATACTAT GGTTTATTCT ATGAAGATGT GTATACTCAA 660  
 15 TCATTATTTA CTGCATTATC TAATTTAAAT TCAAATGCAA TATTACCTGT TCGTTTAGAT 720  
 GGTGCAACAA AAGAATTTTT CGCATGGGGA TTC 753

20 (2) INFORMATION FOR SEQ ID NO: 1077:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 405 base pairs  
 (B) TYPE: nucleic acid  
 25 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1077:

AGAAGCGATT TGACaATAAA ACAATTGAAA AACTTTTGGA AAGCAAGTGG TGGGAGAAAA 60  
 CGCCTGACAA ACTAAAAGGA TTTTCGGTTG AATATTTAAA TAAAAGGAT ACTTAATGAT 120  
 35 ATGAGAATTT TAAATATTGT ATCGAGTAAT ATTGTTCAAG ACCCAAGGGT ACTTAAACAA 180  
 ATAGAAACAA TTAAAGGCGT TACGGATGAT TATAAAATTG TTGGAATGAA TAATTCACAA 240  
 rCTACTAATA AGCGATTGGA AAATTTAGAT TGTAATTATC GTTTGTTAGG TAGCAAGGTA 300  
 40 GATCCAAAAA ATATTCTTTC TAAATTAATT AAGCGTATAA GATTTGCaAC AGGTGtTATC 360  
 CGAGAAATTA AAGCTTATAA AcCTGACGTG AtCATGCaA ATGAT 405

(2) INFORMATION FOR SEQ ID NO: 1078:

45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 504 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1078:

55

CATATTCACA CCTCAATATT CCATAACTTT TACTTTAATA TCAATCCACT TAAATCCATT 120  
 CACATCATTG AGTATAAAAT AATATGGTGA TATACGTTGA AGTTGATTAT CTTATATATA 180  
 5 AGTATACTTC ACAGAATTTA TAAAATTGTT TAGTCATCAT CTTCAGTGTT TAATTCAAAA 240  
 ATATAGAATC TACTGTATTG CATmATAaAT TGAAATGCCA CAAATTGTGC TCCAGCGATA 300  
 ACCAACATGC TCACAATAAT TATAAACTTA GATTCTACGA CATTAGGmAC CAAtATATATT 360  
 10 CGATAATTTT TTCAATATAT ATAAATGAGC TCAACGCAGT TAATAATAAA CCGAAATGTG 420  
 TTTTAGTTTT ACCACCCCAA CGTTTTGTGA CTTTAGGTAA TTTTAATAAC GTGAACATTC 480  
 15 CGCCAATTAC TAATAACAAA TAAC 504

(2) INFORMATION FOR SEQ ID NO: 1079:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 645 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1079:

CATTCTTAAT CAACTTCTTC ATAATGGGAA TTTGGCATGG TAnCGAAGTG TATTACATTG 60  
 TTTATGTTT ATACCATGCA GCATTGTTTA TAGGTTATGG CTATTATGAA CGTTGGCGTA 120  
 30 AGAmACATCC GCCACGTTGG CAAAATGGTT TCACAACAGC ACTTAGCATT GTGATTACAT 180  
 TCCACTTTGT AACATTTGGC TTTTAATCT TCTCAGGTAA ACTTATATAA TAAAGGAGAA 240  
 TTTAATTATG GAATTTAGAG AACAAGTATT AAATTTATTA GCAGAAGTAG CAGAAAATGA 300  
 35 TATTGTAAAA GAAAATCCAG ACGTAGAAAT TTTTGAAGAA GGTATTATTG ATTCTTTCCa 360  
 AACAGTTGGA TTATTATTAG AGATTCAAAA TAAACTTGaT ATCGAAGTAT CTATTATGGa 420  
 40 CTTTGaTAGA GATGAGTGGG caACACCAAA TAAATCGTT GAAGCATTAG AAGAGTTACG 480  
 ATGAAATTAA AACCTTTTTT ACCCATTTTA ATTAGTGGAG CGGTATTCAT TGTCTTTCTA 540  
 TTATTACCTG CTAGTTGGTT TACAGGATTA GTAAATGAAA AGACTGTAGA AGATAATAGA 600  
 45 ACTTCATTGA CAGATCAAGT ACTAAAAGGC ACACTCATTC AAGAT 645

(2) INFORMATION FOR SEQ ID NO: 1080:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 267 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1080:

5 AGATGCCAAA ATCAAAACCA ATAATTTGGC AACAAACATAT AAGTCCACTT TACCGGACCT 60  
 nTAAACTTAT CGTACTGTTA AGAACCAAAC GACTGCCATT ATTTGGTCCT AAAGCCACGA 120  
 TGGTGGTAGC CnTTGTAATA ATGCTGGCGT AGAAATTAAC CGCCACCCCT AACACCGAAC 180  
 10 TATAACGCGG ATAAACCAAT AAAATTATGA TATAATCATC CGTTAAGTCA ATCCATAGTT 240  
 TAACATCCCT TATGTTTAAT TTACTCT 267

## (2) INFORMATION FOR SEQ ID NO: 1081:

15 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 441 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1081:

25 ATATTGTGCC ACTATTAGAA GATTGTAGAG AAGGACAAAA ACGTTATAAA GCTAGTTTGA 60  
 AAGAAGCGTG ATAACATGAC AAATATTACA AAAGAGGTAT TTGATAATTT AGAACAAGAG 120  
 ATTGATTTAT TTGCCAAAAA TAAGACATTA GGTTCCTAGTG AAGCAAAGCC CTACTTGGAT 180  
 30 GAATACCATA GTAAAAATTAT TGATTATTTT AAGCAGGTTA ATGACATAAC TGGCAATATT 240  
 GATTTTGATA AATTAAATCA ATATCCTGTT GTGCCAATGA ATTTTAAAGA AAGATATGAT 300  
 TATATGATTG AACGTAAATA TCATTTTATG GGCTATCGAC AAATGAAGAC CTTTAAACT 360  
 35 GAATTGATTA AAATGnATGC TAGTTATCAA ACAAGGTTAA AGAATAAGCA GGTATnGACA 420  
 AGATTGATCA TTTCTAGTG T 441

## (2) INFORMATION FOR SEQ ID NO: 1082:

40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 410 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1082:

50 AAAATTCTT AGtTGATGGT TATGTTGTT GATTGAATA ATTTGTAGCG AATATTTTGT 60  
 AACAGGGCTA CTAAGAATTT TTATAACAAG AAGTGATTTC AATCGTACTA ATTTTCAGCG 120  
 TTTGATGACA AAAGTGATG TCCAACTTA AATAATGGCG ATAAAAATTA AGTCATGGGT 180

GTTGAATATC AATAAAAGAT TAGCAAGTTA GTTCAAAATG GCTATGTATT GTTTTTTGAA 300  
 ATACATAGGT TTGAAATCTA TATTAATTAT GCACCAAATA ATTTAATTAG ACTCTATCGA 360  
 5 AAATTTCCAA ATTTTGCTTA CTATCTTTCT AATTTTACTT TTATATTGTG 410

(2) INFORMATION FOR SEQ ID NO: 1083:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 586 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1083:

CAGATATTC CTCTATTTA CAAGTTGGTA ACCCATATTT ATCAGACAGC GTAGATAATC 60  
 20 ATACCGAAAA GTTGTTAGAA CGCTACGAGC AGTTGGTGGA TTTAGTTATG yAAAGTAATG 120  
 ATATGAATCA CGTTTATGTG TTACCACAAC TTCATACATT ACTTTGGAGC AATAAAAAAG 180  
 GTGTATAAAG GATAACTTAT TTTACTTTTT GCAAGTCATA TCTAATGAAT AACAATATAT 240  
 25 TAATTGATAT AATAGTTGAT TGAAGTATAA CGAACAGGAG TCCATCATGA TTGTATATAT 300  
 ATTAATTAAT ATTGCTATCG TCGTACTTAT AACTGGATTC AATTTATATA GGCATCAAAT 360  
 GCAACATTTA TCATTAAGTG CAATGTTGTT ATCTATTACG ATaAACGCCT TTATAAATAC 420  
 30 ATTCATAATT GATAAATATA ACTTTATTAC TCTGTGTACT ATAACGATGT TTATCATTTG 480  
 GACGATACTA CAGTTTTTACA TTGATAAAAA ATTA AACCT GTATACATTA CAGACCAAAA 540  
 ATTTATTGCT ATCATATTAA CGATTGTTGT CAGTTTAACG CAACGT 586  
 35

(2) INFORMATION FOR SEQ ID NO: 1084:

(i) SEQUENCE CHARACTERISTICS:  
 40 (A) LENGTH: 638 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1084:

AACACAAGGT AGCGTCATTA GCATTTAGAT TTTATTGCCA AATTATATAA CGATTTATAC 60  
 ATCAATAAGA AAACAATAGA TGAIGIATCT GCAGTTTCTG AAGTGAAATA TGATATTAAA 120  
 50 TCACAAATGA GTGATGATGA GATTAAGCGT TTAGAGGAAC AAGGACTTCA AGCTATTAAA 180  
 GAAGGACAAT TTGCAGTACT TTTGATGGCA GGTGGTCAAG GAACAAGACT TGGTTACAAG 240

55

TTAAAAACAT TGAATCATCA ATCTGGACAT ACGATTCAAT GGTATATTAT GACAAGTGAT 360  
 ATCAATCATG AAGAAACTTT AGCTTATTTT GAAGCACATA GTTATTTTGG ATATGATCAA 420  
 5 GAAGCAATCC ATTTCTTTAA ACAAGATAAT ATTGTGGCGC TTAGTGAAGA AGGGAAGTTA 480  
 ATTTTAAATC AACAGGGTCG TATTATGGAA ACGCCGAATG GTAATGGTGG CGTGTTTAAA 540  
 TCTTTAGACA AGGCAGGATA CTTAGAAGAA ATGTCTAATA ATGGCGTTAA GTCATATTTT 600  
 10 CTTGAATAAT CATCGACAAT GTTTTCAGTA ACATGTTG 638

(2) INFORMATION FOR SEQ ID NO: 1085:

(i) SEQUENCE CHARACTERISTICS:  
 15 (A) LENGTH: 618 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1085:

ATTGCAATAT TATCCGCTTG GTTCAACACG TCATCTTTat tAaTACcATT TATTGgAAaT 60  
 25 tCcACCcATT TCCcGGgCTt CTtACTTCCc TTTATAAAAC TGcCCATTTA ATGAATACTG 120  
 TTTAGCTTCA TCTATTCGTA CTTCCACTAG TTTACCAATC ATTTCTTTAG GCGCTTTGAA 180  
 ATTAAC TAGC TTATTTTAT CAGTGTAGCC AGCAAGAACC TGATCATCTT TTTTACTACT 240  
 30 TCCTTCACAA AGTACTGTTA CAGTTTGTCC TTCGTACTTA CTcATAGCTA TTTGTGAATA 300  
 ATGACCAACT TTTTATTCA AACGTTGCAA TCGTTCCTTT TTGACATTTA AAGGTACATT 360  
 ATCTTTCATT TTAGCAGCAG GCGTACCATC ACGTGTGAA TACAAGTACG TATATGCATG 420  
 35 TTCAAAACCA ACTTCATCAT ACAGAGTTAA AGTTTCTTCA AATTGTTCTT CTGATTTCATT 480  
 TGGATACCCT ACAATAATAT CTGTAGTTAA TGCTACATTA GGAATTCTAT CTTTGATTCTG 540  
 40 TTTTACTAAA TCCAAATAAC TTTCTCGTGT ATATTTTCTA CCCATTATnT TTAATACTGC 600  
 ATTATTTCCA GATTGAAC 618

(2) INFORMATION FOR SEQ ID NO: 1086:

(i) SEQUENCE CHARACTERISTICS:  
 45 (A) LENGTH: 502 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1086:

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CAGCAATATC ATGATCAGTT TAATTCATCA AGAAAGTCTA TCTATACTTT TACAGAAACA 120  
 GTTCAACCAA ATCGTGTTAT TTATGATTTT TATGATTATG ATCCGTATCA ATTAGCAGCA 180  
 5 AATAATGCGA AAGCATTAAA GGATCATATT GAACAAAAC TTAAC TTTAA AGTCCAAAGT 240  
 ACCGGTGTTA KTTACTTTAG TGATGGTACA GTTAATATCA TTCAAGGTTT TGAAGAAAGA 300  
 GATAAATATG TTGATACAGT TTCAACAAAA TCTTCGTTAC GACGTATTAT TAGCGAACCA 360  
 10 nAGAGCTATC TAAACACCCT TTAAATAAAG AACAGGTTGA nCAAATCACA GCTATATTCA 420  
 AGTAAATCA AAGGCATAAT AATCCATTAC GCTCGATACG CACTATGGTT ATTATGCCTT 480  
 TAAATTATTT CTATATATAA nT 502

(2) INFORMATION FOR SEQ ID NO: 1087:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1087:

TTGCCTGATG GACGATGGCC ATCAGAGACT GAGTTTAGAT TGTCTTTAAT GCAACAACTT 60  
 GCTGTAAACC AAATTACGAG TGGTAATGAA AGAATAAGTT CAGTTAATGG GCCACCAGGT 120  
 30 ACAGGTAAGA CTACTTTATT AAAAGATATA TTTGCTCATC TAGTAGTTGA mAGAGGTAAA 180  
 GAGTTAGCTA AACTAAATAA TCCTAAAGAT GCATTTGTCA ArACAAAAAT TCATGAAACG 240  
 GATGATAAAT ACGTATACTT ACTAAAGGAn nTATTGCCAA ATATAAGATG GTAGTCGCAT 300  
 35 CTAGTAATAA TGGAGCTGTT GAAAATATAT CTAAAGATTT ACCGAAAATT GAAGAAATTA 360  
 TAAGAnATCC CGAAAAATGT AAATCCCTA AATATGAACA GAATTATGCA AATTTAGCAC 420  
 ATGAATTAA 429

(2) INFORMATION FOR SEQ ID NO: 1088:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 611 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1088:

TAAGACCTAA TATTTTGGnC CAATACTATG GTGCAGGTnA TTTATATATG ACACCAACAG 60

ATCCATTATT ACATGAGTTT GGTACGAAAA AGTATCCAGA TGAATATCGA TATGGTTTCT 180  
 ATGCTAAGCC AACATTGAAT AGACTTAAACG GGGGATTCTT TGGACAAGTC TTTACTGTTT 240  
 5 ACTATAATGA TAAGTATGTA GTTGTACTTG CATTAAATGT AAAAGGAAAC AATGAAGTTC 300  
 GAATCAAACA TATTTATAAT GATATTTTAA AACAAAATAA ACCTTACAAT ACGAAGGGTG 360  
 TTATTGTTCA ATAATTAATA TAGAAGATAT AACATGTATA TGGCATTAAAG GCATCGACCT 420  
 10 TATCTGACCA GTATACGAGT TATATCTTCT TTTTATAGT GGTAAAAAGT TTAAAGTATA 480  
 AGGTGAAGA AGGATGAGTT TAAAAATATG TGTAACTGA TAAAAGGGGA nATCATTTGG 540  
 TGAGTTGGCA TCAGnCTAAA nTGAATGAAG ACGAATACGT TGGTCCATGC GTGGTGTGAn 600  
 15 TGTTTTCTAA A 611

## (2) INFORMATION FOR SEQ ID NO: 1089:

20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 644 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1089:

CTGGATAATC GCTTTAATAT GATCAATTTG CTTTTCACCTC ATATTAAGCT TATCTAGCCC 60  
 30 TTTCAITTTA TTCATACCTG GAATCATTTC CATAATATCA TCCAGTGGTC CTAGATTTTT 120  
 CACCyGwTCA AGTTGTTCTA AAAAATCATC TAAAGTAAAC GATGACTCAC GCATCTTTTT 180  
 CTCTAAATCT TTTGCTTTTT CTGATCCAC ATCTTGTTGC GCTTTTTCAA TTAAACTTAA 240  
 35 CACATCACCC ATACCTAAAA TACGTGATGC CATACGTTCA GGATGGAATA GCTCTAAACC 300  
 ATCTAACTTT TCACTCATAC CAACAAATTT AATTGGTTTT TGTGTCACCG AACGAATAGA 360  
 40 TAAAGCTGcA CCACCACGTG tATCACCATC TAATTTAGTT AAGGtAACAC CTGTGACATC 420  
 AAGTTGATCG TCAAAAGATT CTGCAACATT GACAGCATCT TGACCCGTCA TTGAATCGAC 480  
 AACTAACATA ATTTGTTTTG GTTTAGCAAT GTCTTTTACT TCTTTTAATT CGTTCATCAA 540  
 45 TGCTTCATCG ATGTGTAATC GACCTGCTGG TATCAATGGA TTACAAAGTC TAAATGTTCT 600  
 TCTTTAGCAn GTTTTAATGC ATTAGTTACA ATTTGGTGTG GGCC 644

## (2) INFORMATION FOR SEQ ID NO: 1090:

50 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 207 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1090:

5 GATCCTATCG TTTTAGTGCA TGGTTTCAAT GGGTTTACAG ATGATATTAA TCCTTCAGTG 60  
 TTAACCTCATT ATTAGGGCGG TAATAAAATG AACATTGCGC AAGATTTAGA AAAAATGGTT 120  
 ACAAAGCTAT GAAGCAAGTA TAAGTGCTTT TGAAGTAAC TATGACCGCG CATTGAACTT 180  
 10 TATTATTATA TCAAAGGCnG TCGnGTA 207

(2) INFORMATION FOR SEQ ID NO: 1091:

(i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 212 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1091:

GACTCTAGAG GATCCCCGCT CAAATGCCAT TTGGTGATAT TCGTGAAGCT GCTGGCGAAA 60  
 AAACATTTAA TCCAGTGGA GATCGTTTCG TAATAAAAAA ATAATCAATA TATTGTTAGG 120  
 25 AATGGGACAG AAATGATAAA GATTCATTAG TTATTCATTA TGTTGTAGTT CTTACACATT 180  
 AGCCGCTGCT AATnGCAACT TAAGAnTAGG TT 212

30 (2) INFORMATION FOR SEQ ID NO: 1092:

(i) SEQUENCE CHARACTERISTICS:

35 (A) LENGTH: 208 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1092:

40 TGGACCTGCA ATTGGTTGCC AGCAGCAACT TTAGCTTCAT AGCTAGCTTT GTGAGCAAGT 60  
 GGTAACCTG GAACGATATC ACCAATTGCA TAGATATTGC TGATAGACGT ACGGCTTTGT 120  
 TTATCAACnn CTAATAATCC ACGTCAGCGA ATTAAACACC TAATCTTCT AGGCCTAATT 180  
 45 CGTCGTGTTT GGACGACGAC CTACATTA 208

(2) INFORMATION FOR SEQ ID NO: 1093:

(i) SEQUENCE CHARACTERISTICS:

50 (A) LENGTH: 902 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1093:

5 CTTAAAAGTT GTnTCAATAA TGATTGTATT AGTTGCATGC TTATTATATA TGAATCATAG 60  
 TATTGATTTA CCTACCCCTTA TTATGATTTC AATTTTTTTCA TTTGTGATAT TTGATAGTGT 120  
 TGAAAATATT AATAGTGCTG CACACGTACT TGAAATGATA GATATGACGA TAGATGATAT 180  
 10 TGmAAAGATA AAAAATGCTC CAGAACTGGA TGAGAATGGA AAAAATTTGA CGATTAAAAA 240  
 TGAAAATATC GCTTTTCAAA ACGTGAACCTT TTCATATGAT GATAAACAAAG TGATAAAGAA 300  
 TGTGAATTTT GAGATACCTA CACAAACATC AACAGCAATA ATTGGACCTT CAGGAAGTGG 360  
 15 GAAATCTACA TTATGTCACT TACTCTTGCG CTTTTATGAT ATCGATGATG GAAATATTCTG 420  
 CATCGATGGT GTTGATATTA AAGATATGAC ATTAAGTACG TTAATGTCTGA AAATTAGTGC 480  
 AGTATTTCAA AAGGTGTATT TATTTAATGA TACGATTGAA AATAACATAT TGTTTGGCAA 540  
 20 TCCAGGTGCA ACGAAAGAAG AAATTATTCTG TGCCGCGAAG CAAGCATGTT GCCACGACTT 600  
 CATCATGTCA TTACCTGAGG GATATCAAAC AATGCTAAAT GAAAAAGGTA GTAATTTATC 660  
 TGGCGGAGAA AAGCAAAGGA TTTCTATTGC TAGGGCGATA TTAAAAGATG CACCAATAAT 720  
 25 TATTTTAGAT GAAGCAACTG cAAGTATTGA CCCTGAAAAT GAACAGCTGA TTCAAACGGC 780  
 AATTAATGAA TTAAGTAAAG GCAAAACAGT AATTACAATT GCACATAAAC TTGAAACTAT 840  
 TAAAnATGCA GATCAGATTA TAGTGCTCAA TGnAGGTGAA ATAATTCAAA AAGGTAGTCC 900  
 30 TG 902

(2) INFORMATION FOR SEQ ID NO: 1094:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 632 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1094:

ACGCAAGGGA TATGATTAAA CACCATAATA TACAATCACC TTTTATATAC ATGAAAGCAC 60  
 45 TAATAGAATC GATTCAATTA AACATAAAAC ATGATTTTAA CCAGCAAGAT TTGATTGAAA 120  
 TACCAATTGT GTATGGTTCG AAATATGGTC CGGATTTAGA ATCACTTTTA AAACATTACA 180  
 AAATCAAGCT AGAAACTTTT ATTGAATTAC ATTCTAAGGC GCAATATTTT GTTTCGATGA 240  
 50 TGGGATATTC ACCTGGGTTt CCTTATTTAA CTGGATTAAA TAAGAAATTG TATATTAATC 300

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GCGGTATTGT AACTACGGAT ACAATTAATG ATTGGTTAGT TATTGGTTAT ACACCATTAT 420  
 CACTTTTTTAA TCCGAAAGAA TCAGATTTTCG CACGCTTAAA GTTAGGCGAT AATATTAAAT 480  
 5 TTAGACCTAT CAATGAAAAT GAATTAGAAG TAGGAGCGTT TAAAGATGTC AATCATAATT 540  
 GAAAAAAGTG GCTTATTCAG TAGCTTTTCAG aCTTTGGCAG AAGGGGATAT GAACATGATG 600  
 GTGTAATTCC ATGTGGTGCA CTTGATACTT TA 632  
 10

(2) INFORMATION FOR SEQ ID NO: 1095:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 212 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1095:

GCAACACGAT TGCTAAAAAA TGATATACTT ATTAATTGTT GCAACACTTG TTTATGTGAT 60  
 AACTGATCA TGGCATTGTG GCGGATTGAT GACCATACAC ATGACGTGAC AATGATAAAT 120  
 25 CATTGCCACT ACTTGTTAAA ACAGCAATTT CTCAAGTGGA AGCTGGTGcN ATATATTnCG 180  
 CCAATAATAT GATGGATGGT TTGTTGCTGA AA 212

(2) INFORMATION FOR SEQ ID NO: 1096:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1096:

AATGAACCTGG GTATTnCTTT TGCCATGCTT GCCCACTGCC ATGCATTTGC TGAAGAATGT 60  
 TTTTGTAGAA CCGgCTTAAG AATTTGAAGT TTGTAGTAGT ATCTAAAAAG ATTACTTGGT 120  
 GATACTCAGG ATGAATTCCT TGTTcATTAT TTTCAGCTCC TTGCCCCTGA ACCATCTGGA 180  
 45 ACAGAGTTAT TTGTGAGTTT TTACCCAATA CTGTGTAATT ATAAAGGTAA TTAATTCAAA 240  
 ACGCAAGCCC CTATATAATG TTTATTAAAT TATAGGTCGA CCGTTTTTAG TACTTTCTTC 300  
 TGCAGACTTT TGTAGCTGCT TGAAGAAATC TcATTATTTC TTAGACCTTT TAAGTTTGCG 360  
 50 AATAAATCTT TCAGTAAAGT CAGTTGAGTC AGTGAATAGA TTTCTTAATT GCCATAATGT 420  
 GTCTAATTCA GATTTACTTA TCAACAATnC TnCTTTACGC GTTGAA 466

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- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 208 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1097:

10 TTTTGATTCA ATAGGCGGTT CCGTGTATC ACTGACAAC TTAGTTGTAG CTCATCTTT 60  
 ATGTATTTCT TCGTTAAATC CTTCAAGTTT TTAGTCGTGG GATTTTAACC TCAGGATGTT 120  
 CCATCATGTC TTGACTATCA AGTCCTTnTA CACGTGTCTT TATGTGATGC TTGATTGCGT 180  
 15 nCCCTTACTT TTTGAATAGG GGTAGTAA 208

(2) INFORMATION FOR SEQ ID NO: 1098:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 571 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1098:

CCTTCAACGA AAATAGCATA TTGACCATAA ATATTATGAA TTGTTTGTTT AACATCTTCA 60  
 30 GTTATTGGAT CTTGACTCAA AAATACATTA AATACTTCAA TACCAAATTT ACGTGACATT 120  
 TCTACAGCTT CATACTATC AATAATACCA TCTTGACTAT AATTAAATGC AGACGGTTCG 180  
 CCGTCTGAAA ATAnGATTAA AAATCGTTGA TGTTGATTTC GACGCATTAA TCGTTCACTT 240  
 35 GCAACTCTAA TAGCAACACC ATCACGATTA TCATCTTGAG GTTCAAGTGC CATAATACGT 300  
 GGGCCATCTT TTTCAAAGGT TGAGTAATCA TAGTTAATAA TTTCATTAAT GATATTTGGT 360  
 40 TGTGCATGCT CGTCTGAATC AAAGGCATCC TCACTGAATG ATAAAAATTC ATGTTTAATG 420  
 TTCAATGCTT TTAACGTCTC GTGGAATAAC ACTACACCTT TCTTCGTTTC AGCCATTTTA 480  
 TCATGCATAC TTGCTGgACG CATCAATTAA CAATGTAAAT GTnCGCATCA AATGATTnAC 540  
 45 TTAAATCTTG TTTTTTGTA AACAATTTAT A 571

(2) INFORMATION FOR SEQ ID NO: 1099:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 214 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1099:

5 TGCAAGTGAA CAAGTCATTA ACTTGTTTAA TACACGTGGG GCACAAGTCG AAGAAGTTTG 60  
 GGTGAAGGGC CATGAAATTA CAGAACTGG ATTAACGGCT GGTCAACAAA TACTTGGGAA 120  
 ATAACAGTTC TATTAAGAAG CGGACAGATG GAAAAGATTT TACCTTTCAT CTGCCGCTTT 180  
 10 TTGATTTGAA GGCCGGACCA AATTTACCA GGAA 214

## (2) INFORMATION FOR SEQ ID NO: 1100:

## (i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 1158 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1100:

20 CACCGTATTG TACAAAGAAT TTAAAGTTTT CGATTCTTn TCTTAATTTA TCATCAGCTA 60  
 TCGGTTTGGT TGGGATAATT TTATTATGTT CCATTTTAC TGGATATTCT TTTTCTTTAC 120  
 25 TACGTGAGTA TCCTnTTTTA TCTTCCCATTA ATTCCCTCAC AATAAATTCa CCTTTTGTCTG 180  
 TTCTGGTATT GCGGTCTACA TACAGGACCA ATCCTCTGGA TTCCaTATTc TTTCCATTG 240  
 30 TTTCTATTGT CATTTTAGAG TGAATTATCC aAGTGCCTTT GTCGCCCTTT TCAAACCTCTT 300  
 GATCTCGAAA GCCTTCCTTA TCATAAAAGT CTTCAAGATT TTTAGTTGGA TACAGGCTCA 360  
 ACGTTTTGTT GAAGTTTTCT TTAATTTGTT TATCTTTACT GCTTTCTTCC TTTTTCATTc 420  
 35 CGCAAGCCCC TATAAAAACA GCTAATAATA CTAAATACAG CCAGAGCCTC AACCTTTTTG 480  
 AGTGAATCAT CATTTACAT CCCCATTTTT ATTTTGTATG CAAAGTTAAG TtCAAATTCC 540  
 AATATTAATA ATATTAGAGG aAaTTtATG ATTAaTCCT CGTGGATTtT AATTGTTAGT 600  
 40 TGTATTTTTT ACATATCAAC ATCACAAATT ATTTAAAAAG CGCAAATATC TTTATAATTT 660  
 TTATTGGCCT AACCAACTAA TTAATTAAGA TAAATTGCGC TTATATTTAA AATAATAACA 720  
 CTGAAACTCA ATGTATTTAC TTATTAATAT TGATGTTTAA ATACAACTTT ACTAACATTc 780  
 45 ATTTTTCGGT TTACATTAAT TkGTTAGATA ACGATATATA TCaTCTCTTA CAGCTTTATC 840  
 CAGTGCTAAA TCCATCGTTA CTACGTTTGA ACCATTCGGC ATTTTATCTT GCTTTTCTGA 900  
 50 ACCTTCTATA TATCCAGCAG TTCCTAAATA ATAAAAATAT ATACCATCAT CATCTTTTTT 960  
 CTGTACAAAA ATATACATTT TAATTCCTTT TGCTCTATGG GACAAAATTT TCTGAACTTC 1020  
 TTTTGATTCT AGCGTTCTAT TAGATTTAGT AAACCATTTT AATTCATCTT GACTTAAAAA 1080

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TGGCATTCT TGGCTTTT

1158

(2) INFORMATION FOR SEQ ID NO: 1101:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 353 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1101:

|                                                                   |     |
|-------------------------------------------------------------------|-----|
| CCAAATGCTA TAAATGCAAA AATnGCTAAT GCGATATTTT TATAGAAAAT ATCTGGTCCT | 60  |
| AAATTTTGTA AATACGTGGT AAACGTTGCG TATGACAATA AGCCAATCAC TACAGCGTAA | 120 |
| ATATGTGAAA TAATTAAACC GAACCGTCTC GCTCTTTCAA AAACAAGTGT TGCTAAAATA | 180 |
| ATAATCAGTA ATCCAAATGA CAAGGGTGT CGCCAACCTA ATGGTAAAAA CTGACCTAGA  | 240 |
| TAGCATCCTA TGCCAAATAT AATCCAATAA TACATAAAAT AAAGCCACAC TTTACTTAcT | 300 |
| GATTGAGCAT GCTGGTTTTG ATGATAATAT GAATGATTG TATTTTGCGA CAA         | 353 |

(2) INFORMATION FOR SEQ ID NO: 1102:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 194 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1102:

|                                                                     |     |
|---------------------------------------------------------------------|-----|
| CCCACACGTC TTCCACCGGA TAGGTTTCGA GCTCGGGCGA ACCGGGCAGG GCGGTGACCA   | 60  |
| CCCCGTGCGG TGTCTTCTTG GCCAGCTTGT TTGCGAGCTT GGCCAGCGTC TTCGTGGGGC   | 120 |
| CAATGCCCCAC GCAACACGGG ATGCCCCACCC ATTGGAGGAT CTGGGCACGG ACCTGGCGGG | 180 |
| CCATCGCTTC GnTG                                                     | 194 |

(2) INFORMATION FOR SEQ ID NO: 1103:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 220 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1103:

TCGCTTTTGC TTTTGCATCA GGTATTGCTG CTATTTTCAGC ATACTTTTTG ACTTTCAAAT 120  
 CTGGTGATCA TGTCATCTTA CCCGATGGAT GTATATGGGC GGTTACTTTT CGTCTCACTG 180  
 5 TGGCAAATTT TGGATCGATT TAATATTGAA TTTTACAACC 220

(2) INFORMATION FOR SEQ ID NO: 1104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1104:

GGACATTGTA TCGACATTTC AAAGATAAAA GCGATTTATG CTACTACGTC ATACAAAGAG 60  
 20 ACCTTGATAT TTTTATCACT CATTTTAAGC AAATTAAAGA TGAATATCAT TCTAATTATG 120  
 AGGTTATGCA AGTGTCTGCA TCGCTTTTAA ATAAGTCATA ATAAAAATCA AATAATTCTT 180  
 GATAAAATGC GCTTTGGTAA AAACGTAATT TATTGTTGCC TGCTCAATA CATTG 235

(2) INFORMATION FOR SEQ ID NO: 1105:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1105:

GCGGGGGCAG GTAAATCCAC TTTGACACAT CTTATTGCAG GTGTTTATCA GCCAACAATA 60  
 GGTACTATAA GTACAAACCA GCGTGATTTT AATATTGGGA TACTTAGTCC AnAGCCCTAT 120  
 40 ATTTCAAGGCT CTATAAAGA GGATATTACG ATGTTTAAAG nTATAGAAA TAATACTAAT 180  
 GAAGAAGTGC TAGACGAAGT AGGGTTTATT AGACCAAGTG CCATCCTTC 229

(2) INFORMATION FOR SEQ ID NO: 1106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 596 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1106:

1 rAATTAAAT CAAAATTGTA TGAAGTAAAT GTAATCGCGT CAACAAACGG TAGAAAGTTT 120  
 ATTAATGGTG AAATATTAAA GCAATTTTGC GATAACTATT ATGACGAATT TGaAGACCCCT 180  
 5 TTTTAAATC ATGTAGATAT AGCAAATAAA CATGACAAGA TTATTATTTT ACCTGCGACT 240  
 TCTAATACGA TTAATAAAAT TGCmAATGGT ATATGTGaCA ATTTATTATT AACTATTTGT 300  
 10 CATACAGCTT TTGrAAAAC TCTATATTT CCAATATGA ATTTACGAAT GTGGGAAAAT 360  
 CCAGTTACTC AAAATAATAT TCGATTATTA AAAGATTATG GTGTATCAAT ATATCCAGCA 420  
 AATATTTcAG AAAGTTATGA ATTAGCGTCA AAAACATTTA AAAAGAATGT TGTCGCACCT 480  
 15 GGAACCATAT AAAGTTCTGG gAATTCATTT GaGATTAGAA TATGGAAAAT CaTAAAGCGC 540  
 GckATTGATT AGTTTAATGA ATGATTGGAG TCnTTTGAAG ATnCGATTTA CAATGG 596

(2) INFORMATION FOR SEQ ID NO: 1107:

20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 673 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1107:

30 ACTAGCTAAA AATAATATTC TATTCCTTTT AACATGGGCA GTTCCAGCGG CAATTAGTGG 60  
 TATTTATATT AAATATATAA ACAAGGCTAC GGTAGAAAGA TTTTAAAT TAGTATTTT 120  
 CATATTTTCT GTTTCATTTA TTTTGTAAT TTAAATACCA AAACCTACAG GTGAGATACC 180  
 35 TAGCTATATC AATTTTGGAC TTATGAAC TAACAAACGCT TCGTACCTTT CAGCATTAC 240  
 TGCCGGATTA GGCATTTATT TCATTATGAA AGGTTCAAGT AAACATAAGT GGATATATGT 300  
 TCTATTTACA ATAATTGATA TCCCTATTGT GTTTATACCA GGAGGGCGTG GAGGTGCTAT 360  
 40 TTTATTAATT CTTACGGCT TATTTGCATT TATACTTATT ACGTTTAAA GAGGAATACC 420  
 TATCGCAGTA AAAAGCATT TGTATATTT TGCATTAAGC ATATCTAGTG TATTGATTTA 480  
 CTTTCTTTT ACAAAAGGTT CGAATACTAG AACATTTTCA TATCTACAAG GTGGAACACT 540  
 45 TAATTTAGAA GGTACTTCTG GgAAGAGGAC CGATTTATGA AAAAGGTATT TACTTtATTC 600  
 AACAAAGTTC GTTATTAGGC TATGGGCCAT TTAACATtA TAACTAATC GGAAATATAC 660  
 50 CACATAACAG CAT 673

(2) INFORMATION FOR SEQ ID NO: 1108:

55 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 506 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1108:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| TCACAGTGGC | GGCACAAAAA | GTAAGTGGAG | ATTATTTTAA | TTTAATTGAC | CATAACGATG | 60  |
| GCACAATGAG | CTTTGCTGTT | GCAGATGTCA | TTGGAAAAGG | TATACCAGCT | GCTTTAGCAA | 120 |
| TGAGTATGAT | AAAGTTTGGC | ATGGATTCTT | ATGGACACTC | ACAATTACCG | AGTGATGGTT | 180 |
| TAAAACGTTT | AAATCGTGTT | GTTGAAAAGA | ATATTAATCA | AAATATGTTC | GTCACAATGT | 240 |
| TTTATGGTTT | ATATGAAGAA | ATGAACCATT | TATTGTATTG | TAGTTCAGCT | GGTCATGAGC | 300 |
| CTGGATATAT | TTATCGCGCT | GAAAAAGAAG | AATTTGAAGA | AATTTCAGTT | AGAGGTAGAG | 360 |
| TGTTAGGAAT | CAGTTCACAA | ACACGATATC | AACAACAAGA | AATTCOAATA | TACCTTGATG | 420 |
| ATTTAATTAT | CATTTTAACG | GATGGTGTGA | CTGAAGCTAG | AAAAGTGAAG | GTACCTTTAT | 480 |
| AGATAAACAA | AAACTTTTAG | AATATA     |            |            |            | 506 |

(2) INFORMATION FOR SEQ ID NO: 1109:

25

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 552 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1109:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| TGATATTGAA | AAAGATGTCA | TTGTTAAAGC | ACAAGAAAGT | AAAATTGCTC | AAGTTATCAC | 60  |
| GAATTTGTTA | ACGAATGCAA | TTAACTATTC | TTATGAAGAT | GGAGATATTA | ACGTTCTGTG | 120 |
| GTATCGAGAT | GACTTTCGTG | TCATTTTCGA | AGTACAAGAT | TTTGGTATAG | GTATTAAATT | 180 |
| AGAAGACCAA | CAACGTATTT | TTGAAAGATT | TTATAGAGTA | GATAAAGCAC | GAAGTAGnAG | 240 |
| ATTCTGGTGG | GACAGGTCTT | GGATTATCAA | TTACAAAGCA | TATAGTAGAs | GCCCACCAAG | 300 |
| GCAATATTGA | AGTGAATAGT | CAAGTTGGCA | AAGGCTCAAC | GTTCAAAGTT | ATTCTAAAAG | 360 |
| ATTATAAAGA | ATAAnAATTA | AAGTGGAAC  | AGCGCGTGTA | TTTTTCACGA | AGTTGTTGCT | 420 |
| GCTTTTTTAT | TTCGTTCAAA | TCTCTATTGG | TATTAAATTA | GAGTTAATGA | AGTGAATAA  | 480 |
| ATTCGGTTGT | CAATTTTGTC | ATTTGTATAT | GTCGATTGTG | AAGTTATAAG | TAATAGATTG | 540 |
| TTGTGAATCA | nG         |            |            |            |            | 552 |

(2) INFORMATION FOR SEQ ID NO: 1110:

55

(A) LENGTH: 244 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1110:

10 AACAGATCAA CAATTGCAGA TCAATTACTC GTCATATTGA TCAATTATCT CTGACAACGA 60  
 GTGATGATTT ATTACGTCAT TGATTGATCA TCACAAGATA AGTCGCTATT GATTTCTCAA 120  
 TTTTACAACG AnATTAGGAA AGCTGnAGCA GATAATTGGC TAAGTTGGAC GATAAAGGTT 180  
 15 ATCAATCGCC AATCGTTGCC ATTGAAGAAC TTTTGCTCAC TGGCGCACGC TTCAGATGAT 240  
 ATTT 244

(2) INFORMATION FOR SEQ ID NO: 1111:

20

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 825 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1111:

30 AGTATTGAGT GTTTTGATTT AAGAGACTTG GAAAGTGAGT CAATAATCAA AATCTTACTC 60  
 AATACTTTTA TTTTGGTACT CGCAATTTAG ATTTGTTAAC TAATTTTTTC GCTTATTATA 120  
 AAACGAAACA ATCAAGTAAA CGATAAAGCC TACAAAGATA CCCAATAAAA TAGATAGTAC 180  
 35 TGCCGTCACT ATTAATGGTA ATTTGAAAAA TATTGTAGG AAAATmCCAA TGATAATTGC 240  
 GATAATTACT GCAAtTaATG TGACTGTATT TTCATTTGAA ATGTTCAttT ATttTCACTC 300  
 CttAACAAATA ACATTATATC ATGCTATAGC TTTCCAAAAT ATTGAAATAT GTAGATATGG 360  
 40 CTATTGACGA TATTTCTTAA CTTTATATG ATTAATCGGA ATGAAAAAAG AGAAGTAGGT 420  
 GGCAATATGA AGTCAAATAA ATCGCTTGCT ATGATTGTGG TAGCCATCAT TATTGTAGGT 480  
 GTATTAGCAT TTCAATTTAT GAATCATACG GGTCCTTTCA AAAAGGGGAC GAATCATGAA 540  
 45 ACTGTACAAG ATTTAAATGG TAAAGATAAA GTACATGTTT AAAGAGTTGT GGATGGTGAT 600  
 ACATTTATTG CAAATCAAAA TGGTAAAGAA ATTAAAGTTA GGCTTATAGG GGTGATACG 660  
 CCAGAAACGG TGAAACCGAA TACGCCTGTA CAACCATTTG GCAAAGAAGC ATCAAATTAT 720  
 50 AGTAAGAAGA CATTAAACAA TCAAGATGTT TATTAGAAT ATGATAAAGA AAACCAAnTC 780  
 GCTATGGTAG ACCATTGGCG TATGTATGGA TAAGTAAAGA TCGTA 825

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- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 621 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1112:

10 TCCCTATAAA TCCCACAAA AAAAGGGTAA ATCCGAACGT CAAATTTTCAT CTCTTTATGC 60  
 CAATCAACGA TCGATTTACC TTTTAAAATT TAAAATGTAT CTGTAATACT CTTAGCAATA 120  
 15 TTTGTATATG CTGCATCTTC CATAGGTGGA TTGTGTAATC CTGCACGCAT GTCACGATAG 180  
 TAACGTTGTA ATGGTCGATT CATTTCTAAG CTTTATGAC CAACTATTCT CATCGCTAAA 240  
 TCAATCACCT CAAGCCCTTG ATTCATTACC ATCACTTTAC TCGCACTTGT TGGATTTCTT 300  
 20 ATCTGACTGT CATCTTTTATA TTGTTGATAC CCTTTTGCTG TACTCCATAA AAATTGTCTC 360  
 GCACATAACA ATAGCGTTTC CATTTTCCCT AAATTTTGTT GCACAGTTGG CAATGTTGCA 420  
 ATCGTTTCCT CAATACTATT AGGGCTATGT TGGATTGCAA AGTCTACAGC ATAATTTCTA 480  
 25 GCAGCTTGTG CTATACCTAA ATAACAGCTT GGTATATGCA ATATCCAACC ATTGCGCGCT 540  
 TTACTTTTCT CTGTTTCCAC TAAATGTTTT AATGGTACTT TTACATCATT TAATATTAAA 600  
 TCATGACTTT CTGTCGCTCG C 621

(2) INFORMATION FOR SEQ ID NO: 1113:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 619 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1113:

40 GTACCTTGTT TTTCACTGTT AATTTCCCAA ATATAACCTG GTGTAATACC GTATTGTTTT 60  
 GAGAAGTACT TGAAGGCACC TTCACCTGTa ATCATGGCAC GTTGTTCTTC TGGAAATGTCA 120  
 45 TTAAATTGT CTTTACTGTC TTTACTGTCA TTATTTAATT TTTCCAATTG AGCAATGTAT 180  
 TTGTTACCTT GCTTTTCATA ATCTGCTTTA TGTTTTTTGT CGTTATCGAT AAATGTTTGT 240  
 TGAATTGTTT TTACGTAATT AATACCGTTA TCTAAACTTA ACCATGCGTG TGGATCTTGT 300  
 50 TTATCTTTGT TGCCTTCTTC ACCGTTTAAA TAGATAGGTT TAACATCTTT TGATACTGCG 360  
 ATAACTTTTT TATCTTTTAA TGATTACCA GCCTGTTCTA AGGCTTTTTT AAACCAACCG 420



ATATCyTTAG GTTtAAcyTC aTAWTCaTGA GGATCTkGAC CAACAGGTAC AATACnATGA 540  
 ATATCGACGT TGTCTCCACC AACATTTTTA GCCATATCAG ATAGAATTGA ATTCGTCGnT 600  
 5 ACTACTTTnA ATTTGCCAT 619

(2) INFORMATION FOR SEQ ID NO: 1114:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 549 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1114:

GAaaACCGCA CGACAATGAA AAAAGATATC CGGTTAAAAT GGTCGATAAT AAAATCATTTC 60  
 20 CAACAAAAGA AATTAAAGAT GAAAAAATAA AAAAAGAAAT CGAAAACTTT AAGTTCTTTG 120  
 TTCAATATGG TGACTTTAAA AATTTGAAAA ATTATAAAGA CGGAGATATT TCATATAATC 180  
 CAGAGGTGCC GAGTTATTCG GCTAAATATC AATTAATAA TGATGATTAT AATGTAAAC 240  
 25 AATTACGCAA AAGATATGAT ATACCGACGA GTAAAGCTCC AAAGTTATTG TTAAAAGGTT 300  
 CAGGGAATTT AAAAGGCTCA TCAGTTGGAT ATAAAGATAT TGAATTTACG TTTGTAGAGA 360  
 AAAAAAGAgGA AAATATATAC TTTAGTgATA GCTTAGATTA TAAAAAAGC GGAGATGTAT 420  
 30 AATCATGGCT CAATCAGAAT ATGAAATCAA TCCCGGAAAA AGAGAGTGAT GAAATGATAA 480  
 AACGTGTAaa TAAATTAGTG CTTGGTATTA GTCTTCTGTT TTTAGTCATT AGTATGCACT 540  
 35 GCTGGTTGT 549

(2) INFORMATION FOR SEQ ID NO: 1115:

(i) SEQUENCE CHARACTERISTICS:  
 40 (A) LENGTH: 317 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1115:

TGTTATTGCA ACTATTAAAA ATATnAAAA CAAAGACTTA ATTGATTATT CTTTATATAT 60  
 TAAAAAAGGT TTAGTGGAGC CATTTATTGT ATTCTATAAT CAAGAAAATA TATTCTACAT 120  
 50 TAGCAATGCT GTTATAGATA TCATCAGTGT ATCCAAAGAT ACTCTTGATT ATATAAAGTC 180  
 AGAATTCAAT GATCACTGTG tTCGCCATAC TGATTTTATA GCACAGAGAA AAGCCGTAGT 240

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TTATCATCTT CGATGAA

317

(2) INFORMATION FOR SEQ ID NO: 1116:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1116:

|                                                                     |     |
|---------------------------------------------------------------------|-----|
| ACTATGACTG CAATGCCAAC AATGAATGTT ATTGCATAAA GCATATGCAT TTAATCAAGC   | 60  |
| TTATGTTATT TAGCAAGGGC AAGCCACTTC TCGATTTCATG GCTTGCCTTA TTTTATTGTA  | 120 |
| TATTTTAAAT TATCGTTGCT GGGCCCTTGA TTGACAATCG TATTAAAATG GCCTTATTAA   | 180 |
| GTCAACTTTG TCTATACGGT TTGGAATCTT CTACCCAATG TCTTATAAAA GACAATCCCG   | 240 |
| CACCTGAAAC ATAACATCATG AAnATAAGAA nATGGTATAC CATTAAATnTG AATCCATTTC | 300 |
| CAnTTTATAA CGTTGTAAAT GACACATAAT TAGAATCATA AAGTTTTTCG TGGGATATTG   | 360 |
| AAACTTTACC CATAAGAGAC ATCATGGATA AAAGCGAGGC                         | 400 |

(2) INFORMATION FOR SEQ ID NO: 1117:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 696 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1117:

|                                                                    |     |
|--------------------------------------------------------------------|-----|
| TGCATATAAT GTTCAAACGG CAATGATTCC ACTGTATAAA CCTCTTGTCG TGGATGATCT  | 60  |
| TTAATTTGTT GTTTTAATAA CTGAACTCTT TTTTCATGTT CATAATGAAC ATAAATAAAT  | 120 |
| GCACTAAGAT ATATCACAGC TAAAACTAGT GATGCACCTT TAATAAAATT AACATTGATT  | 180 |
| GACTTATATT TCCGAAATTC TTTTAATAAA ATAATTAAAA TGATTACATG TATCGTATAA  | 240 |
| ACAATCAAAA AATTACCTGG TTCTATTGGA GTAACAATGA CTAGTGTCGA CGCCGAAACA  | 300 |
| CATATTGCAA TAAGTAAGGA ATATAAAGTG ATTTGTGTTT TACGATCATT AATAGACAAA  | 360 |
| TAAATACCTA CAAATATCGA AAACGCAAAG TAACCACATA CAATTACGTT CACAAAACCA  | 420 |
| ACCAATCCAA TATCTGTATT TTTATTTAAT AAAAAGTATG TGTAATAATAG TAAATAATAA | 480 |
| AGCGGTAAAG TGATAAATCC TATCATAATG ATACGACGCT TTAATATTGT TAAATGTACA  | 540 |

ATCTGACTGA AAATGACACC ATATGGAAGT GACGTTGATA TCATTCTGC AAATTTTGAA 660  
 AAGATACCTT GATTATTTGA AACTTGTGA TATTCT 696

5 (2) INFORMATION FOR SEQ ID NO: 1118:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 223 base pairs  
 (B) TYPE: nucleic acid  
 10 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1118:

GCAGTGACAA TCAATAATTT GTAAC TAGAA GATAATAAG AGAACGCTCT ATAGAGACGA 60  
 ATTGAAGGTT TGATTTTAAT GTCTGTTAGT AAGAATCATA TCAATGAGAT GCCTATAGTA 120  
 20 CTCAGAnTAT ATTAAATTAA AACCGTCATT AATTGTTTTT CCGAAAACCA TTTGTAACCA 180  
 TTTnAATGTA GTTGGACCTA CCTACGTTCT CCAATAATCC ATT 223

(2) INFORMATION FOR SEQ ID NO: 1119:

25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 265 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1119:

35 CTGCTTTACC TTTTCCAAC TTAGAAATTG CTACATAGGG GCCTTCTGCT TTACCGCCCC 60  
 AATTCCAATT CCACATTTTC AAGAAATAAG GAGGCAAAAA TGTTCAATA TGAATTGGAA 120  
 TTATTTGTTT TCTTATTAGG CCGAGATGCG CCGCGTGCGG CTGCTGGAGA TGGCGGACGC 180  
 40 GATGGATATG TTCTGCCAAG GGTGTTGTTG CGCATTCACA GTTCTCCGCA AGAATTGATT 240  
 GGCTCCAATT CTTGGAGTGG TGAAT 265

(2) INFORMATION FOR SEQ ID NO: 1120:

45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 329 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1120:

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CATGACATTA CATGCTTATT TAGGTAGAGC GGGAACAGGT AAGTCTACGA AAATGTTGAC 120  
 CGAAATAAAA CAAAAaATGa AAGCAGATCC GCTTGGAGAT CCAATCATTt TAATTGCGCa 180  
 5 ACTCAAAGTA CATTTCaATT AGAAcAAGCC TTTGTCaATG ATCCGGAATT AAATGGTAGT 240  
 TTAAGAACAG AAGTGTGCA TTTTGAACGA TTAAGTCATC GTATTTTcCA AGAAGTTGGT 300  
 AGTTATAGCG AACAAAAGTn ATCTAAAGC 329

10 (2) INFORMATION FOR SEQ ID NO: 1121:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 252 base pairs  
 (B) TYPE: nucleic acid  
 15 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1121:

ACACCTCTTT TTTAATATAT GTGAACTATA TATAGTGTAT AGAGAGGTTA CTTGTTACTC 60  
 AATATAAACA AAAATCAACT TTGTCAAAAT AAATGTGACA AAATTAAATA AAGTGTCAATC 120  
 25 AATGTGACAG TATAGATCAT TTTGCAAAAA GTCAAAACAA AAAAAATTGTT TTAGGGATT 180  
 TTCAAATTT TCATTGTGGA AAATGATTTG nCAAAACAAA ACAACACnTT GTGAGCAATG 240  
 AAGCTTCAAT GG 252

30 (2) INFORMATION FOR SEQ ID NO: 1122:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 35 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1122:

nAATAATAGG CGCCACCTAA TAAACCAGCT GGAATGCCTA TCATTGGTGT TGTGAATGAG 60  
 CTTAATACAA TAACAAGTAT TGTAAAGCA ATGACGTTAT ACCAAGTTAC AGTCAAATTT 120  
 45 TTCAAATCCT CATATGATTG TTTTACTAAT TCTCTAAATT TCATGATTCA ATCTCTCCTT 180  
 TTCTTAAATC AATTAATAGT TATACTGCAT TGCTTAAAT CAAnATATCT AATGAAGCAT 240  
 CTTTAAATCG TAAGTGTTAA AIGGTTTCTT TAATCAATTT GTTTGAATGT ATAAAnAGCAA 300  
 50 TTAAAGCAAA AGTAATGTAA ATGAGGGTGT ATACAACAAT TACTACAATA ACCGGCATGA 360  
 AGGAAATATT ACCCATCAAT TTCATAAATG CGATTGCGGC 400

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- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 270 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1123:

AATACAACCT TTTATCATAG TGTAATGTG TTCTACCAGT ATTGAGAAGT TTTTCATATTA 60  
 TTCAATACCT GAAATCGCCA TAGTAATATT ACTAAATGCA CACTGCATAT GTTGTTTAAC 120  
 AACACAACCT TAAAAATATA TTCTAACTCT ATCTACGAAT GTACTTAAAT ATCATAACAA 180  
 TCTATTCCAA ATCAATTAC ATTATTAGCT ACCTTAAAAA CCAAACCGAG GCCTTAGGCC 240  
 TCGGTTTAAA TATATATAAC GACGACATG 270

(2) INFORMATION FOR SEQ ID NO: 1124:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1124:

GGTCTTCTGT ATCAAATTAT ATTATGAGAG TTAGACTCAG TATTAATGAA ATCGTTGATA 60  
 AAGATCAAGT GCTTGCATCA CAAATAGGTG GATTACTATG ATGTTTAATC AAATTAATAA 120  
 TAAAAATGAA TTAGAAGAAT CATATGAATC TGAGAAAAAA CGTATAGAGA ATGAACTGCA 180  
 AAATTTAAAT GAACCTTAGGC ATAGAACTCG AAAAGAAAAA GAACGTAGTT ATGATGTTTT 240  
 TCAATATTTG AAGCACGAAA TGAATTATAG TGAAGATGCC CAAAGGAAAA TGACGAGAAA 300  
 TATAGAAGCG TATGAGCAAG AAATCAATGA GATAATTAGA AAGCAAGAAT GGAAATTAGG 360  
 AAGAATATAA AGAAGACTTA AAAAAGTCTT ATGAAAAGCA 400

(2) INFORMATION FOR SEQ ID NO: 1125:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 377 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1125:

AAATATAYTC GATCATTGAT AATATGTGCT TTA CTATTCC AAATAACTTT CAAATTTTGA 120  
 TAATATTCAT CAATACTCTC AATATAACTA ACCAGTTTAT ACAACCATTC GCCATCGACT 180  
 5 TTCACATATT TTTGAATACT ATTTCCAAyT TtAAGACGTG TTGGTTCATT TACAAAATGC 240  
 CCCAAATTAA TACCACTTAA TAATCCAAAT GGAGTTGGAC GTGTTGACAT TCTAATTAAA 300  
 TATTTTAATA AACTTTCTTT AGCATCTCTA ACCTTCTTGT TATCGCCATC AAAATTTATT 360  
 10 nCnTGTAAG TACAATA 377

(2) INFORMATION FOR SEQ ID NO: 1126:

(i) SEQUENCE CHARACTERISTICS:  
 15 (A) LENGTH: 227 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1126:

GTTACATTAC TGTTTCATGTC CACAACGTTT GTCAGCGATT ATCATCATTG TGTTATATCT 60  
 25 TATTTATAGC AAGTGCATGG TCTGGATAAG TAAAGGTATT CATACTTAAG TAACTTGAAC 120  
 ATTGGTTTAG GACTATTTTA ATGGTnCTGC TtnAATTGTT GGCCAACTGG TTCTTATTTT 180  
 30 AAATATGTAA CTAGCTCTAC GGGTAGTTAC TAAACACATC CTGGTTT 227

(2) INFORMATION FOR SEQ ID NO: 1127:

(i) SEQUENCE CHARACTERISTICS:  
 35 (A) LENGTH: 717 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1127:

CCAATGATAC CGTTATAGCA TGTTAATGTT TTTGTACGAA TATAATCTAA AACTTCGAGT 60  
 TCATCACTTA ATTTCCACGT TTCTGCTTTG TTTAACCACA TTAAAGGAGT ATGAATGnCA 120  
 45 AAATCTTTGT CCATAGCTAG GCTTAATGTT ACGTTCATTG ATTTTATAAA ACTATCGCGA 180  
 CAGTCTGGGT AGCCTGAAAA GTCTGTtTCA CATACGCCCTG TAATAATATG CTTAGCCCCA 240  
 50 ATTTGATAAG CTAGAGCGCC TGCAAACGAC AAGAAAAGTA AATTTCTAGC TGGAAACAAAT 300  
 GTATTAGGTA TACCATCTTC ATTATTAGTA ATTTCCATAT CATGTTGTGT TAATGCGTTT 360  
 GGAGTAAGTT GTGATAATAA TGACATATCT AAAACGTGAT GTTTCATTCC TTGATCTTGT 420

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EP 0 786 519 A2

AGTTCAACTT CTTTGAAATG TTTTTTTGCA TAAAAGAGAC ATGTTGTACT GTCTTGACCA 540  
 CCACTAAAGA CAACGATGGC TTTTTCATTA TTAAATACAC TTTCCATTTT GTAATTGCTC 600  
 5 CTATCATTA TAATATTAAT AAAGAGGTTA ATGGCATTGA TAAGCCCGTT TTAAATTTAT 660  
 AAAATAAAAA AAGCCnATCT CCATAAAAGA TAGACGAnAG AAATGGGTTG CTCCTAT 717

(2) INFORMATION FOR SEQ ID NO: 1128:

10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 595 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1128:

20 GATTATTGCA TTGACAACTT ATATCTATCT AACGTTAGTA GCATTTAATT TCATTTCCGG 60  
 GGTTCCTAACT TTACCAGGAT TAGCGGCGTT GGTATTAGGT GTAGGTATGG CTGTAGATGC 120  
 CAATATTATC ATGTATGAGC GTATTAAGGA TGAACCTCGA ATAGGTAGAA CGATAAAGCA 180  
 25 AGCCTTTCT AAAGCAAACA AAAGTTCATT CCTAACAATT TTTGATTCTA ACTTAACAAC 240  
 AGTTATCGCC GCAGCAGTAT TATTCTTCTT CGGTGAAAGT TCAGTTAAAG GTTTCGCGAC 300  
 AATGTTATTA TTAGGTATTC TAATGATCTT TGTACAGCC GTGTTCTTAT CAAGATTCTT 360  
 30 ATTATCATTA CTTGTTTCAT CAAATATATT CAAAATCAA TTTTGTTAT nTGGTGTTAA 420  
 AAAGAATAAA CGACATGATA TTAATGAAGG TGTAGATGTT CATGACCTTA AACTTCATT 480  
 35 CGAGAAATGG AATTTTGTTA AATTAGCTAA GCCATTAATT GGAGTAAGTA TTTTAATTGT 540  
 AGTGTCGGTT AGTTATTCnT TATATCTCAA GTAACTTAG GAnTGAnTCT CAAGT 595

(2) INFORMATION FOR SEQ ID NO: 1129:

40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 371 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1129:

50 ATTTTAACTT TCTAAGAACA AGTTGTCAAG ATTTTTTCTT AACATATCAT GTTCTGTTAC 60  
 AATATTAATA ATGAATACCG AAAGGACGAA TTGCAAATGA AAAGCGTTGG CTTAATCACA 120  
 GAATATAATC CCTTTCATAA TGGGCATCAA TATCATATTA ATCAATCTAA AAAACTTACA 180

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ATCTATAATA AGTTACTCGT GCAAAATGGC TTTCCACGCG TGTTTAGTTT CGGACTACCA 300  
 GCAACTGCAG TTATCACTGG CGnCATTTGC GACTGCCGTT AAGCGCGGTT TTGGTGCgTA 360  
 5 CATGCnTGGn G 371

(2) INFORMATION FOR SEQ ID NO: 1130:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 200 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1130:

ATGATGATGA GATTATGACT TTGCGAAAGA TATCGGTGCG CCTTATGAAT TTAAACAnA 60  
 20 nTAAAGACCA TGGTCGTTAC CGGTAGTTAA CTTGTCAGCT GGTGGCGTTG CGACTCCTCC 120  
 AAGATGCTGC TTAAATGATG GAATTAGGTG CTGACGGTGT ATCCGTTGGA TCCGGGAATT 180  
 TTAAACCAG AAGATCCCGG 200

25

(2) INFORMATION FOR SEQ ID NO: 1131:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 203 base pairs  
 30 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1131:

ATGAGCTAGT CGATTAAAGT TAATATTTGA AAATGAAGCA GGCATTAAA TGCAATAAAT 60  
 TAAATAAGTT GTCATTAAAG CATTAAATAAT AGAAATGATT TTAACAGGAA AAAAGTGATG 120  
 40 AATATTTGGA AAAGATATAT ATCGTGCACT GTCCTGAGAG ATTAGATTTG GGAAACCAAT 180  
 TTATCCnTGA ATCGAGATGT nGC 203

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(2) INFORMATION FOR SEQ ID NO: 1132:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 182 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1132:



ATCTAACAGT ATTGAAATCT TTGTTAGCGT CAATCGACCA TGTATTTTTA AGTATTGTCT 120  
 CTAACAACTT AGCACGACGT CTTAACCCTT TAGTAAACAA TCCTTCTTTA GnTTTAGTAC 180  
 5 GT 182

(2) INFORMATION FOR SEQ ID NO: 1133:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 485 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1133:

CAAATTTAGC CAGGnATACA AATACATATA ATAAACTGT TTGTAAGCTT ACGTTGACAA 60  
 20 TCTGGCGTAA TTGGAAACT AATGAATTTT CTCCAAGTAG GTTTTACCCT GTAAACmAAA 120  
 TAACAATTCm AATAATATGr AATCACAAAg CGACTAGAAA TCCGGTAATA TGAATAATCA 180  
 TATATTCaAT GTGTAAaTAAT TTTAACAGCA ATAAATAGAC AACATAATAA TTTAACGTAT 240  
 25 TAATGCCGCC AACAAATGATA AATTTTAAAA TTTCAGCATG CGTTTGTGTT AGTTTCATAT 300  
 GTGTACTCCT CAACATCAnA ATATATGCAT AACTACGTTT TCGAACATAC TCGAATATGC 360  
 GAGCCAATCC GCTTCACTTC AAATATGCTT ATTCAATCT TTATACCCTT TCACAGCAAT 420  
 30 TTAGTCTCTT TnCCCTCATC CTTATAGGCC nTATATGTAA CCGATTATCG GGTGGACTCA 480  
 TTGGC 485

35 (2) INFORMATION FOR SEQ ID NO: 1134:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 213 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1134:

45 CTTGTTTTAT CGACAGATGC TGAACACGCA GTCaAAATAA ATAAATTACA TAATAAAATT 60  
 CCAATTAATC TTTTCATAAT ATCATCCTTT TGTTTTTCAA TTGATATTCA TTTTCAATTA 120  
 50 TAAATATTA rAAGAATTAG TCAACGCCTG TGAGTAATAC ACATCAGTAA CATTICTATr 180  
 TTCATTATG ATATTATCTA ATTATTAATT TAT 213

(2) INFORMATION FOR SEQ ID NO: 1135:

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(A) LENGTH: 526 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1135:

10 TGTGACTCCA TGTATTCATG TATCATTGTA CATTTGTGAA TTGGTTGAAA ACTGATAGTG 60  
 CCCGTTTAAAT TACAGGTACT GAGGATGCTT TCAGGACATG GATTTGTTCG AAAATATGAC 120  
 AATATTTTAC TATGGCTCTT CACTTCTCTA GGGAAATTGC TATCTTGATT AATCCAATCA 180  
 15 ACCAATTCAC CTAATGGTGT GTCATCACCA AGAAAACTTT GCATAAATTC GTAAAAGCTC 240  
 AATACCTCAC CTCGATTaAT ATACTTGAGC CATTaATATA ATACCATAAA AGAATGTGTA 300  
 TTTTaCATAA AACTTTTTaT AAAGCAATTT TATAAATCTA AATTTATTGA ATGTTTAAGA 360  
 20 AGTTGTGTAT AATGAAATAA ACGTGTGAA ATAGTTAGGA TGATGTTAGT GGATATCAAA 420  
 CATATGAAAT ATnTATTGA AGTCGTTAAG CAnGGAGGCA TGAATAATGC TTCCAAATCA 480  
 TTATATATTG CACAACCTAC AATTAGGAAA GChATTAAAG ATATTG 526

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(2) INFORMATION FOR SEQ ID NO: 1136:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 321 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1136:

35 AGCAAAAGCA ATGATGACAA AAGAACAAGC TATGTTAGCA GATGGAAGTA TTAAACAAGA 60  
 TCAATATGAT AAACAACGT TATCGAnAAT CGGAAAATCA CAATTAGATG AATTGTCTTC 120  
 40 TAAAGATTTA CAAGTTTTAG CTATTTTTCC GAGAGATGAA TGCAGGAACA GTTTTAGATC 180  
 CACAAATGAT AAAAnATGGA AGATGTTTCCAG TGCAAAAAGA GTATGGCAGC AGTTTTCTCC 240  
 45 AGCAACTTTT CCAnATTTAC CCAGGTGTTT AACACGTCCT ATTGGATTTG GGCTTAGGAC 300  
 AATTATTCCA TATGGGCGGA T 321

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(2) INFORMATION FOR SEQ ID NO: 1137:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 330 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1137:

5 ATAAATCCTT ATAAATCAT GAGTTGGACG ACTTATCCAC ACAATTATAC TTTTCAGTT 60  
 CTCTATATGT CAAATACCTG TGAATATGTT GCTAAAAATA GTATAACTTT GTGTGTAATT 120  
 TCTAATTATC CACAATTCTG AAAACTATAA ATGTGCATAA GTGGATAmCT TTcCTTCTAT 180  
 AGAGTATCTG TTAGTGAGTG TATCAAAaCA GTTTGGGAAa TAATTtATAA AGTnTGTATA 240  
 10 AGAnCTGTAT AAGGTGTTTC AACATTGTAA ACACTCATGC TTCGGACCAA ACTCATGGTG 300  
 ATGTTATGAA ATTTGATTGC TCGCATCGnG 330

(2) INFORMATION FOR SEQ ID NO: 1138:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 459 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1138:

25 CTTGATAAGG GAAGATTTGC CAGCACCATT CGGGCCCATG ATACCAATTA TTTCGCCGCG 60  
 TACTGGTATC GATAAGGAAA TGTTTTTAAG TACATGCTTA TTACCTAAAA ACAGATTTAA 120  
 ATCTTTTGT TCTAACAAAC GTTTATACCT CCTAATTAAA AGTTTAGGCT AACCTAATTA 180  
 30 ATTGTATAAT AAAGTGAAG TATTTATCAT GTCAAGTAAA TTCGTGATAT AATATAGACA 240  
 ATGTATGTGA GGTGAAAGTA TGTTAACTGA AGAAAAAGAG GACTATTTAA AGGCAATCCT 300  
 TACGAATAAT GGCATAAAAA ACTTTGTGAC AAATAAAATC TTATCTCAAT TTTTAAATAT 360  
 35 TAAGCCTCCA TCTGTAAGTG AAATGGTAGG ACGTCTTGAA AAAGCAGGCT aTGTGAAAC 420  
 AAAACCATAC AAAGGTGTTA GATTAACAGA GGATGGTTT 459

(2) INFORMATION FOR SEQ ID NO: 1139:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 165 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1139:

50 TAAATACTCT CGCCGGTTAT TTCGCTTCCT CTATACGGAT TGGCGAAAGA TACGGTGCAT 60  
 CGGTTTCAAC TAGCAAACGC TCCATTGACA CATGCTTAGC AACTTCTTTA GGCTGTTTAG 120

55

## (2) INFORMATION FOR SEQ ID NO: 1140:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 214 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1140:

ACCTGAATGC CCATCAATGA CAGACTGGAT AAAGAAAATA TGGTACATAT aCACTATGGA 60  
 ATACTATGCA GCCAGAAAAA AATGAGGTCA TATCTTTTGT GGGACATAGA TGCAGCTGGA 120  
 GGCCATTATA TTTAGTAAAC TAATGCAGGA ACAGAAAAAC AAATACTGCA TGTTCCTACA 180  
 GCAGGAGCTG AATGATGACA ATTCATGAAC ATAA 214

## (2) INFORMATION FOR SEQ ID NO: 1141:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1141:

GTTTCTAGTT GTTTATAGTT ATCGCATCTC TTGATGTAAA ATCTAAGATG TTTATGCATT 60  
 TCTAGATGTT AATTCTTCGC TGCTTAAGAA TTATCTTGAT GGTAAATCTA GTTGTGCCAT 120  
 GCATTTTCTC ATGATGAATC TAAGGTGTTA ATTCATTGAT GTGTGCTGTT TCTTGnnGCT 180  
 TCATTATCTT GATGGTGAAT TTCGTTGTCT AATGCACTTT TTCAAATGA 229

## (2) INFORMATION FOR SEQ ID NO: 1142:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1142:

TTATGAATCG TAAACACTAT TATGAAATTG CGAGAGTAGT ATGGACAATT AGAATGATGG 60  
 TTTGAGATna ATGAGTGTTA TTAACCACTG CGTCATTTTC AAAATTAGAT GCCATTTGCT 120  
 GTTTATAATA AGAAGATTG ATAATTAAC ATGATAAGAA AAAATAATAA TCCCCTAAAT 180

GGTAAATGTG TGAATAGGAA TATCGTTaAA CTAGTTGTGT TCATGCTAAT TTTAGTTGTA 300  
GCAGTAGCGG G 311

5

(2) INFORMATION FOR SEQ ID NO: 1143:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 403 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1143:

15

GATCATGCTG CTTATGAATT ATTAAAAGAG CAATTAGAAG ATGTGCTTGA TACATTAACT 60  
GATAGAGrAG AAAATGTATT ACGATTAAGA TTTGGTCTTG ATGACGGCAG AACAAGAACA 120  
CTTGAAGAAG TTGGTAAAGT TTTCGGTGTT ACACGTGAAC GTATTCGACA AATTGAAGCA 180  
AAAGCACTTA GAAAATTAAG ACATCCAAGT CGTAGTAAAC GTTTGAAAGA CTTTATGGAT 240  
TAATTTATAT CAATTTTAAT GATTGATACC AAGACATGAA TAAGCGCTTA TTTATTTTAA 300  
GATTAAGATT TAACTTGAGT GAGGTTGGTA CATTGAATAA TGTTCAACCT CTTTTCAT 360  
AAAGGAGAAT AAAATGATTT CGTTAAATAA CCGATTAACG ACn 403

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(2) INFORMATION FOR SEQ ID NO: 1144:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 612 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1144:

40

nTTTTTATTG ACGAATnGAT TTGGATGCCA GTGGTTTGGT CCTAAATCTT GAATGGTAAT 60  
CGGTATTTTG AAGTTGTCAT GTGCTACACG GTAACCGATA CCnATAAGTA CGAGTGCGAT 120  
GACAATGGTT GTTACGAGCA AGATGTATTG TAACCATTCG TTGAACACAA CAAGTTGTAT 180  
ATAAGGCTTC ATTGACGATA CCTCCAAACC AATACAGCTA AATTAATTAT CAAAAGTGCG 240  
ATGAAsCTAA GATAGAACT AGGGTGCAGT TCTAAAATGT AGTTGTTTAA AATAATTTCT 300  
AACAAATTGAT TTGTTACAAC TGCGAACGGT TGAATATTGA AAACACCATT TGCTATATGT 360  
TGTAACAAAAA TCGTAGGTAT TGTTAAACCA GATAACACCA GGATGACAAT AGCTAATATG 420  
ACTTTACTAA TACTATTCAA CAAGCCTGTT GTTAAAAGTT CGATGAGTAA TAACCACAGT 480

50

55

AAGATATTG GAATACTGAA CACAATCCAA ACTACACCAA CGATACTCCA TAACATAGTA 600  
TAAACCATG Tn 612

5 (2) INFORMATION FOR SEQ ID NO: 1145:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 223 base pairs  
(B) TYPE: nucleic acid  
10 (C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1145:

GAATTAATTA CGCAATATCC GCATCTTAAA TCAGTAATCG AAAAATATGC TTTAAAATAA 60  
AAGTGATCAA TGAAGTGGTT TGAAGGTTGT nAATAAACCT TTGAGTCACT TCCATTTTTA 120  
20 AAnGTATCCT GGATGGAACC AGAATAGATT TGAAGCTTCA GCGGTTTTTA ATGAAAATAG 180  
CCATTAAATG ATTTGGAAC GGTAAAGAGG GGTATTTAAA ATG 223

(2) INFORMATION FOR SEQ ID NO: 1146:

25 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 598 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1146:

35 CGCTACGGTT GTCACGTAGA GATTAAAGAC ATTTCGTTTA GCAGTCTTTT TTATTGAAGT 60  
AGACAATGCA AGATTAAATG GTAGTGTCAT TTCATTTTAT TCAACTGCTA GTAATACAAT 120  
ACTCAGTGTT ATTTCTGAAG ACTGGTTGAT AATGAGACAT GCATATTTAC AAAACTGTGT 180  
40 ATATTGTGTA TATTGTATAT ATACAGAAGT TGATAGGGGG ACGTTGATGA AAATAATTTT 240  
AAAAACAAT AGTGATTTTC CGATTATGA ACAGATTAAAG CAACAAGTAA AACAAAATAT 300  
TTTAAAGGGA CATGTTGCTC CTGGAGAGCA TTTGCCGTCA ATGAGAGAAC TTGCCAAAGA 360  
45 TCTTCAAGTA AGTTTGATTA CTACCAACG TGCTTATGAA GATTTAGAGA AAGACGGTTT 420  
TGTTACAACA ATTAGAGGAA AAGGGACCTT TGTTAAGGAG CAAGATAGTT CTATTTTAAA 480  
AGAGAAACAA TTTTTTACCA TGAAAATTG GGTAAAGGA ATTGGGTTAA TTAAGCnCAA 540  
50 GCCCATCCGA ATTGCCACTT GAGGGAnTTC CAGGATATTT nACCGTCATT TATTGAGG 598

(2) INFORMATION FOR SEQ ID NO: 1147:

55

(A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1147:

10 CAAATCCAAG TGCAACAGCT TTATCAACCG CTAAAGCTAA ATCCGTATCA GCTTTTTCAG 60  
 CTTGAACTGG TTTGATTGT AACTGTTCTG TTAGAAGTTG GCGTTCCTCT TTACTGACTG 120  
 AATCAAAGTC TCCCAGTGGG AAAAAAGGGA TAATTTGATG CTTCAATAAA ATCAAAGCAC 180  
 15 CTCTATCAAC GCCGCCCCAT TTACCTTCAT TACTTTTGGC CCAAATATCT TGCGGCAAGT 240  
 GTCGATCAGA ACATAATAAA TTTATATGCA TATACACTCA ACCTTTCAAT GCTTGTGTGA 300  
 CTTTTTAAAA TCCCCTGGTT AAAGGAAAAT GAACnGGTTA CCAGCATTGT AGGCACCATT 360  
 20 TCAACACCAA CTTCCGGCGGA TcnggATTAC GCCTCCATCC 400

(2) INFORMATION FOR SEQ ID NO: 1148:

(i) SEQUENCE CHARACTERISTICS:

25 (A) LENGTH: 352 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1148:

TTTTATGGGT CGTATTTTTT AAAGAACAGT CATCTCAATC AAAAGAATAG AATTATGATT 60  
 35 AAAATTGATG TrGTGTAATT AAAGTAAGAA ATrrkAAATT TCCTAGATAC TAGATAAATC 120  
 GTTCAATATT TTATTAATAA GGAGGCCAAT GAyTGTGAAT TATCTTAAAC ATAAGTTTAA 180  
 TAACTTGTTA ACTACAATGA TTGTTCTCTT TATTTTGTGA CTTTCTGGTG CGATTTTTTT 240  
 40 AACATTTCTA GGGTTTGTT TATATGGATT AAGTAGAATA CTTATTTATT TTAGGTTGGG 300  
 TGACTTTACA TATAATAGAA GTATGTACGA TAACCTATna TATTATGGCA GT 352

(2) INFORMATION FOR SEQ ID NO: 1149:

45

(i) SEQUENCE CHARACTERISTICS:

50 (A) LENGTH: 916 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1149:

55

GGCAAGTGTC GATCAGAACA TAATAAATTT ATATGCATAT ACACTCAACC TTTCAATGCT 120  
 TGTGTGACTT TTTTATAATC CTCTTGTTTA AAGAAAAATG AACCTGTTAC TAGCATTGTA 180  
 5 GCACCATTTT CAACACAAAC TTTCGCTGTA TCGGTATTTA CGCCTCCATC AACTTCAATA 240  
 TCAAAGTTTA ATTGACGTTT CATTTTAATA GCATTAAGAC CCGCTATTTT TTCTACGCAT 300  
 TGATCAATAA ATGATTGACC ACCAAACCCT GGGkTAACTG TCATCACTAG TACATAATCA 360  
 10 ACAATGTCTA AAATAGGkTC AATTTGTGAT ATkGGkGTAC CAGGATTAAT TACTACACCA 420  
 GCTTTTTTAT CTAAATGTTT AATCATTTGA ATAGCACGAT GAATATGAGG CGTTGATTCTG 480  
 ACATGAATTG AAATCATATC GGCACCATGT TCTGCAAATG ATGCAATATA CTTTTCTGGA 540  
 15 TTTTCAATCA TCAAATGTAC GTCTATAGGT AATGTTGTGC CTTTTCTTAC TGCATCTAAT 600  
 ATTGGTAAAC CAATAGATAT ATTAGGCACA AATTGACCAT CCATAACATC AAAATGAACT 660  
 CCGTCGACGC CTGCTTCTTC AAGTCGTTTT AATTCATGTT GTAAATCCAA AAAATCAACA 720  
 GATAATAATG ATGGATATAG TTTTGTCAAT TAATATCTAA CTTTTCTATT TGAAATTTCA 780  
 TTAAATAGTT GTAAATAATG GTCGTATCTA AATTGCGCAA TATTCCTAT CTCTAATTGA 840  
 25 TGChTAACCA TTACCATTAG GGTCCTTGCh AAGChTACCA ATCCCAAACC TTACCATGGT 900  
 TCCCCATAA CGGTTT 916

(2) INFORMATION FOR SEQ ID NO: 1150:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1150:

AATTGGTTGT GGCTTCATAA TGTGCAGTTG CTAGACTGAC AACAACATCG TTTTCTAAGC 60  
 CTACGATAAA GACATAATCG TTTTCGGTTT TGTGTTTTTC TAATGAGCGT TTGATGATAC 120  
 GTTTATCTTC AGTTAAAGAT AAATTTAACT TAGTATCGTA AAGTTTAAGT GCTTCGTTGT 180  
 45 AATGTGGATC TTTGACAGAT TGAATGGTTT TAAATTCAT AAGAACACCT CCCCATTTA 240  
 AATAATATTA TAGCATAATC GCCTGCTGTA AAAGACTGTT CATAAACTTT TAAATGGTAT 300  
 AAAAaACTGT ACTATCTTAA ATTAGACAGT ACAGTAATCT CATTTTGAAT TCAGTGTGAT 360  
 50 AACTAAGCtT TGGGACCTTT AGATGChTTC ACAAATGTG 400

(2) INFORMATION FOR SEQ ID NO: 1151:



(A) LENGTH: 156 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1151:

10 CACCGTAGTT GCTACCGAAT ACCACCATGT CGCCAGGTTG TGCTAAGAAG TCCGGTGTAT 60  
 TTTGGTATAC AGTTAGCTAA TCCGTCGAAG TTGTTAGCGA CGGnATATCT TTTGACCTAA 120  
 ACCTTTTAGA GTAATCCAAA CAAAACCTTC CAACCA 156

15 (2) INFORMATION FOR SEQ ID NO: 1152:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 233 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1152:

25 TCAATATATT TA'TTTTCTAA TGTTAGCATT AGACTGTCAA TTAAC'TTGCT AAGTTGTTCT 60  
 TTTT'TAGTAA TTAAATAACG CATATAATCA TCTAAATTTT TCATTTT'TTC ATCTAGCATT 120  
 30 AAAAGGTAGT GCTTGATATT ATTTCTACTG TTGCTCCAAA AACTGnTCAA ATATACGTCA 180  
 CATAGTCATA CTACACCTTT ATATAGTTTA AATACCAATn GCATGACCTC GTG 233

(2) INFORMATION FOR SEQ ID NO: 1153:

35

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 339 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1153:

45 TATATTAnCT ATCGTTTAGT GAATCGTTTT TTTAAAGTAA AGAGAATTTC ATATATTACT 60  
 GGTACAAC'TA CAAGTGTTAA TAAAGTTGAT GAAAT'TmAAC CACCAATAAC TGTAGCAGCT 120  
 AATCCTTTTCG AAATAAGAAT CGnGCTATCT TGACCAAATA ACAnAGGAAC TAATGCACCA 180  
 50 ATTGTTGCAA TCGCCGTCAT TAATATCGGT CTAATTCTAG TACCGCCTGC TTCGATTAA'T 240  
 GCTTCTTTCA TCTCCATGCC CTGTTGCTCA TTATTAATAA CACGGTCTAT TAACACAATG 300  
 GCATTTGTTA CTACGATnCC AATTCAACAT TAGCATACC 339

55

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 817 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1154:

10 GTCACCCGAG GAGATATnCA ACTATTACCA TCAAGATGnG AAAAATGGTg CCTTGGGCAA 60  
 TTGGTTTTTTT CATTTTAATC TTAATTATTA TATTGTTCTT TTTACTAAGA AACTTCAATT 120  
 15 CACCTGAAGC GCAAACATAA ATATTAGTGA ATGCGATTGA GAATAATGAT AAACAAAAAG 180  
 TAGCAACATT ATTAAGTACT AAAGATAATA AAGTAGATTC TGAAGAAGCA AAAGTATACA 240  
 TTAACTATAT CAAAGATGAA GTTGGGCTTA AGCAATTTGT CAGCGACCTT AAAAATACGG 300  
 20 TACATAAATT GAATAAGAGT AAGACCAGCG TAgCTTCTTA TATTCAAACC AGATCTGGTC 360  
 AAAATATATT ACGTGTAAGT AAAAATGGCA CACGTTATAT CTTTTTCGAT AATATGAGCT 420  
 TTACTGCACC TACCAAGCAA CCAATTGTTA AACCgAAAGA AAAAACAAAA TATGAGTTTA 480  
 25 AATCTGGTGG TAAGAAAAAG ATGGTTATAG CTGAAGCAAA TAAAGTGACG CCAATAGGTA 540  
 ATTTTATACC GGGGACATAT AGAATTCCAG CTATGAAATC AACTGAGAAC GGTGATTTTG 600  
 CAGGCCATTT AAAATTTGAT TTTAGACAAA GTAATTCTGA AACGGTAGAT GTTACTGAAG 660  
 30 ATTTTGAAGA aGCAAATATA TCTGTAACCT TAAAAGGCGA TACAAAATTA AATGaTAGTT 720  
 CTAAAAAAGT AACTATAAAT GaCCATGAAA TGGCATTTC AAGTTCCAAA ACGTATGGTC 780  
 35 CATATCCACA AAATAAAGAT ATTACCATTT CCAGCTT 817

(2) INFORMATION FOR SEQ ID NO: 1155:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 322 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1155:

45 AnAGAAAATC TACTCTTTTA TTTCACCGGT CCTTTCnTAT CTCTCATTG GCATACTCCT 60  
 50 TTTTCCATAT TTTCCACTTT CAnTACAGTG AATTTACATG TAATTTTACA AATACAATAG 120  
 GAGTGCACAA TGGAATATAA CACTTATCTT TATAAAATTA TTTTATATAT TGaCGCACTT 180  
 AAAACAATCT ACAAATAAAA TTATTATTTT TAGTTTTCaA TGAATAATTC ATTCTTATCT 240

ATTTAAAAAT ACATTTAACT GC

322

(2) INFORMATION FOR SEQ ID NO: 1156:

- 5 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 777 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1156:

15 GTTTCCAAnG GAAnGnGAAA AGCGTCAACC AATGTAAC TA TTTAAAGTCA AAGTGTTTGA 60  
 CCAAAATTTGA CTTAATATGT AAAATAATGA GTAACAGTTA TTACAAGGAG GAAATATAGA 120  
 TGAATTTAAT TCCTACAGTT ATTGAAACAA CAAACCGCGG TGAACGTGCA TATGATATAT 180  
 20 ACTCACGTTT ATTAAAAGAC CGTATTATTA TGTTAGGTTT ACAAATTGAT GACAACGTAG 240  
 CAAATTCAAT CGTATCACAG TTATTATTCT TACAAGCGCA AGACTCAGAG AAAGATATTT 300  
 ATTTATACAT TAATTACCA GGTGGAAGTG TAACAGCTGG TTTTGCGATT TATGATACAA 360  
 25 TTCAACACAT TAAACCTGAT GTTCAAACAA TTTGTATCGG TATGGCTGCA TCAATGGGAT 420  
 CATTCTTATT AGCAGCTGGT GCAAAAGGTA AACGTTTCGC GTTACCAAAT GCAGAAGTAA 480  
 TGATTCACCA ACCATTAGGT GGTGCTCAAG GACAAGCAAC TGAAATCGAA ATTGCTGCAA 540  
 30 ATCACATTTT AAAAACACGT GAAAAATTAA ACCGCATTTT ATCAGAGCGT ACTGGTCAAA 600  
 GTATTGAAAA AATACAAAAA gACACaGATC GTGaTaaCTT CTTAACTGCA GAAGAAGCTA 660  
 AAGAATATGG CTTAATTGAT GAAGTGATGG TACCTGAAAC AAAATAATTC AAAGTAAAGA 720  
 35 GTAGACTAAG CnGTCTGChC TTTTGTATG AGTAAACCAA GGTGTCAATA ATTTGTn 777

(2) INFORMATION FOR SEQ ID NO: 1157:

- 40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 155 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1157:

50 TAATGTGGT AAATGGGTTA AGGCTCAAGG TCGTATTGAA GAAGATACAT TTATTAGAGA 60  
 TTTAGTTATG ATGATGTCTG ATATTGAAGA GATTAAAAA GCGACAAAAA AAGATnAGGC 120  
 TGAAGAAAGC GTGTAGAATT CCACTTGCACT ACTGC 155

55

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1158:

10 GACTGGTAAA ATTTACTTGC AAGTAAAGCT AAAAGGTCAA ATAGATAAAG AACAACTTGT 60  
 TTTTCAAAAT GACAAAAATG AAGAATTTCC TTTTGTTATA AAAGATGAAA AGGATGACAC 120  
 AATAGTAAGA ATTTTAATTG AACAGCATAT GGATAAAATC AATATGCATG TTAAAACGTT 180  
 15 GGCTGAAAAG AAAAATCTAG ATAACAAAGA AATGGTGTAT TCTATTCATT TTAAAGAGAA 240  
 AAAAGTACAA CATGATGATG CAAAAGAAGT GCCTTCAAAA CATCAAAATC AAGAAAATAA 300  
 20 TCAAGATCAG CTAAAAAnAG ATATTGATGA CAAAnAAGAT AGTCAAAAAT CAGATACTAA 360  
 GGGAAAGACG TACTAGCCTT TTTACTGGAA AAAGGGTTTA 400

(2) INFORMATION FOR SEQ ID NO: 1159:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 347 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1159:

35 GTTGGTACAG TGTTGAGTGG CTTTGAATAT CGAACACAAA AAGAAAAGTA TGACAATTTA 60  
 TATAAATTTT TCAAAGATAA TGAAGAGAAA TACCAATATA CAGGCTTTAC AAAAGAAGCA 120  
 ATAAACAAGA CGCAAATGT CGsAtATAAA AATGAATATT TTTATATCAC TTACTIONGTC 180  
 40 AGAAGCTTAA AAGAATATCG TAAGTATTAC GAACCATTsA TTCATAAAAA TGATAAAGAA 240  
 TTTAAAGAGG ATGGACCAGC CAGAAAGAGT GATTACGCGC TATCAGTCAG TACACATGTT 300  
 AGTCCAGGAA TTTCTAGCAT CnGTGTGTGA ATGAnGGGTA CTTTATn 347

(2) INFORMATION FOR SEQ ID NO: 1160:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 203 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

ATAGTTATTA ATTAGTAGAA TGAGGATATT TAAATATAAA GGATAGTGTT GAACTTATGG 60  
 ACATGAATTT CGATTATACA TGAACGGTGT TGTAGAACAA GCAAGGAATG AAATTGAATC 120  
 5 TCGGGGATAT GAGCAATTAA CTA CTGTCAGA AGATGTTGnA AAGTCCAAGA TGGnCACCTA 180  
 GTTATGATCA TCTGTATGTG GTG 203

10 (2) INFORMATION FOR SEQ ID NO: 1161:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 203 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1161:

20 AATTTTCCnT TTCCATTGAC ATAACAATAT TTAATGGGGC CCAGTTACAG GAAATATCAG 60  
 TTTAATTTTCG TCTTCAATAC CATAGTCATA ATATTGAGTT TCTTGTGTG GAAAATTTCC 120  
 25 TACATAGTTA CTCATTTTAA TTTGTnCAAT GTTTGAATTC GGAGGCACTC TGTTAGCATA 180  
 TCTTTAAACA TTAAATATGG ATA 203

(2) INFORMATION FOR SEQ ID NO: 1162:

30 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 220 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1162:

40 GCCATTTTGT TGATAAAGGT ATACTAAAGG TTATCGTTTT GAAATTTTGA GTA ACTAGGA 60  
 TATGTTTCGT GTTATAGGAC CGGAATTTGT GGTATACGGT AAAATTTTAA TGCTATTGGA 120  
 ATTTTAAAAA ATGGAAAAAC ATGGACATTn AAATTGGAAT TTCATAATAT GTCCTAATTG 180  
 45 GACTTAACTT GTTGGGAGTT CATTTTACTA TTTnTATGGT 220

(2) INFORMATION FOR SEQ ID NO: 1163:

(i) SEQUENCE CHARACTERISTICS:  
 50 (A) LENGTH: 409 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 55 (D) TOPOLOGY: linear

TTCACGTGCT TTGCCATCTT TTAAGAAAAA CACAGAAGGC TTTTGCATTT GATTGTAATT 60  
 GGATGCCATA GAGTAATGAT ATGCACCAGT TGATAATATA GCAAGATAGT CTCCACGTTT 120  
 5 GACTGGATGA AGGTAATTTA GCGTCTTTAA TAATGATATC ACCAGACTCA CATAATTTTC 180  
 CAGCTATAGT TACACTGtCA TCTGCTTCTT CATTTCTATT AACAAGCAAT GCTTGATACT 240  
 TTGCGTCATA AAGTGCAGTT CTGATATGAT CACTCATACC GCCATCGATT GAAACATATT 300  
 10 TATTArTCTC TGGAAITTTCT TTAATGGtTC CAACTTCATA TAAAGTAACG CCAGCtTCAC 360  
 CTACAATTGA TCGTCCCGGT TCAATACCTA TTTCTGGTGC ATCTATACC 409

15 (2) INFORMATION FOR SEQ ID NO: 1164:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1164:

25 CTAAATAATT GTTTAAATTT TTCTTTACTA TTTAGACTCT TTCGTTTGCC ATGACTTTGT 60  
 TGACTTGCAA TGATATGAAC TTAATTTTGT CGAAAAAAGG AATCTAGATT CATATATTCG 120  
 GTAAATCTAC CTCTTCATC TTTTGAAGT TGTAATTCTA GCAATTCACG TTGTATCAAA 180  
 30 TTTTGAATAA CCATTGTAAT ATCACGTGGT TGCATAGTTG AGCCCTTCTG AAGCAATTCA 240  
 ATTGAAGGCG TTTATTTGAG TTTCGAAGCA TAAATCAATT TAAGCAAAAG ACTAAATCTG 300  
 35 CTCATCTAAA CCTAAGTCAC GTAAGGTCTA ATAATCnCTC GTATCACTAC GGTCTGCTTT 360  
 AATGATATTA nCCAGTnCGT GCCCCTTTAA ATTAACCAaA 400

(2) INFORMATION FOR SEQ ID NO: 1165:

- 40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 327 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1165:

50 TCGTGATTAT TATTAACATT TTTTAGTAAT TGATAAAAAT CTTTCTCGC TTCTGTAGGG 60  
 CTAGTGATAA TCATATAAAC CCTCCTTTGT TTTCTGTTAC GCTAATTATA GCGTACGCAC 120  
 TTGAGTACGT CATATTACCA ACGAGTTCAT CGTATnCTTA ATACCTATAT GCTATCGTTC 180

55

GGACACACTA CCGTnCCCTA CCGCTTAACC ATTTTCGGGC TTAAATATTT TnAAAATTTT 300  
 GTGAGGATCC GCTTAAAAAA CCCATA 327

5 (2) INFORMATION FOR SEQ ID NO: 1166:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 148 base pairs  
 (B) TYPE: nucleic acid  
 10 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1166:

TTAGGATTTT AAAAATATGT CAGGTTTCT AACATAAGC TTAAACATT GATATACTG 60  
 CGATTTCGAC TTCTAAAACG aCATrAAACA ATCTACAGCT AAAATATTTT TTCAATTTT 120  
 20 AAAAATAATC nGATAATCT CCGCAAAA 148

(2) INFORMATION FOR SEQ ID NO: 1167:

(i) SEQUENCE CHARACTERISTICS:  
 25 (A) LENGTH: 243 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1167:

nAAGGTTATC GCTCGTAAAG ATGTTGTGA AGAAGTATTT GACGACAGAG ATGAAGTGA 60  
 35 TTAAAGTACA GCGCTTGTTA AAACCCTGCA TATGAAATTG GTGTATTACG AGAAGAGTAC 120  
 ACTAAAGTTT TGGTCGTGTA GGTCTCAGCA GCGAACAGCA GTATGCACGT CTnCGTGTGC 180  
 TGACGTGAAT TTTATTTGAG GATTATAGAC AAGAGAGACA ACTTACTGGA TTTTGCCCTG 240  
 40 TTG 243

(2) INFORMATION FOR SEQ ID NO: 1168:

(i) SEQUENCE CHARACTERISTICS:  
 45 (A) LENGTH: 321 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1168:

TTATATACTA CTATAAGTA ATCCAACCTCT CAAGAAGGTA AATGGGCAAT CAAAAGCTAA 60  
 55

CTACGATATG ACGCACAAAT GTTTAGGGTA GGTGTTGACA TGTGTACAAA AACCAGCAGA 180  
 AAATGGTTGT ATTCTTAGGG AAGCATTTCAT CCTGTTTGTT TATGGATTCA TGTACGTTA 240  
 5 CGCAATATGT TTTTATGTAG CACAGCGAAG TTACAAGTTT ATACGCTATA TATCCnTTGA 300  
 TnATAAGCAG ATGAAAnCGG C 321

(2) INFORMATION FOR SEQ ID NO: 1169:

10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 191 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1169:

20 TCTACATATA AAATTACTCT AAAAATATGT ATAGTCATAA ATTGTTGGTT GATTTAATTA 60  
 AAAGTATGGA AATTAAGGGG CTCTTATGTA TATAAAAAAA TGAATTATGA TAAATGTAA 120  
 GAnAATATTT AGGGTCGATT GGAGAGATAC CAGTGGTACC AATTAGAAGA CGACAGTTTA 180  
 25 ATGTTACCAT A 191

(2) INFORMATION FOR SEQ ID NO: 1170:

30 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 303 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1170:

AAATGTGGCAA GGATGTGTGA TATGACTACA CATTTAATAT CATCCTACAT AATAATTTTG 60  
 40 CGCGCCAAAT TATCACACAT ACCACACCTA CGATAACAAC CAGCAAATAA GGAGATAGCT 120  
 ACACGTATTT ATCGTCCAAC GCACTACTAT ATGTTGTTGn ATGGGCACAA GTTACAAGTG 180  
 CTGCGCGATA nCAAAAGGTA TACCCCTAAA ACGTCCCAA AnAATCGGTT GCCCTCTAAA 240  
 45 TTGTTTGTGT GCCATGATTA GTAAGCTCCT ATGTTAGAAA CAAATTTTTA ATATGTATAT 300  
 TAG 303

(2) INFORMATION FOR SEQ ID NO: 1171:

50 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 299 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 55



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1171:

5       AAAAAGGTGA GAAGACAATA ACGnACGCCA ACACTAAAAA ATCCATTAAC TGGAGAAATT       60  
       ATTAGTAAAG GTGAATCGAA AGAAGAwATC ACAAAGATC CAGTTAATGA ATTAACAGAA       120  
 10       TTCGGTGGCG AGAAAATACC GCAAGtCATA AAGATATCTT TGATCCAAAC TTACCAACAG       180  
       ATCAAACGGA AAAAGTACCA GGTAAACCAG GAATCAAGAA TCCAGACACA GGAAAAGTGA       240  
       TCGAaGAGCC AGTGGATGAT GTGATTAAAC ACGGACCAAA AACGGGTACA CCAGAAACA       299

## 15       (2) INFORMATION FOR SEQ ID NO: 1172:

      (i) SEQUENCE CHARACTERISTICS:  
           (A) LENGTH: 821 base pairs  
           (B) TYPE: nucleic acid  
 20        (C) STRANDEDNESS: double  
           (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1172:

25       CCATAGCACC ATACCCATAA CCAACCCGGA TCCACTAACA AATAAGTAAT AATThACACG       60  
       TAAAGAAGTA AATAGTTTGT TTAGTTTTTT ATCAACATTA TCAATGTTTT CCTCGACAGA       120  
 30       CACTGGAATT TTAACGATAG CTGTACCATT TGTAATTGAG TAGTTCGTTA TTTCACCCAT       180  
       ACTACTATTT GGTAAAATTG TTAATCTCC TGAAATTGTA TTGATTCGTG TTGAACGAAG       240  
       TCCAATTGAT TTAAGTGTTT CCTCTGCTAC AGTTGTACCA CCGTTATTTA TCTTAACATA       300  
 35       ATCACCTACA TCAAATTGGC TTTCAAATAT AATAAAGAAT CCTGTAAAtTA CGTCTTTAAC       360  
       TATAGTTTGA GCACCAAAAC CTAAGCTAA GCCTACGACA CCAGCACTGG CAATTACCCC       420  
       TTCAACACTA ATGCCAAATT TACTTAAAT CGTCGTAATA ACTATAAACC AAACGATATA       480  
 40       CTTCACTACA TTTTGAACAA GAGATATTAA AGTTTTAGAG CGCTTTTTGT TACTCTTTTT       540  
       ACTTTTATTT TGAATCTTAA ATCCCTGTTT AATCATTTTA TTCAGTATTT TAATAACTAT       600  
       GAGGGCTACG ATAATATAAA TAACAATCAT AGCGATTTTA GTTGCAATGT TTTCATATGT       660  
 45       TTCTATTTTT GTTAATGGCT CAAATAGAGA TGAAATAATA TTCATGACTT GATTCATGAT       720  
       AAGCGTTACT CCCTCTATA TGATATATCA ATATTGtATT CATATTTtga TATACTTCCC       780  
 50       AACCTACGAA AGTCTCAATA TATCTAGAAT CAAATGGTCA C       821

## (2) INFORMATION FOR SEQ ID NO: 1173:

      (i) SEQUENCE CHARACTERISTICS:  
           (A) LENGTH: 318 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1173:

CCCGAAATTA AAATAATAAT GTATGAATTT TTAAATATGA TTAAACGTT TTCAGTTTTT 60  
10 ATGAAAACGC ATGCATTTTA CAAATAAAAA TGGTACGATG GCACTGGTTA AAACGTTTTA 120  
CTAAAAACAA ATCATGAGGT GTATAACATG GCTGTCTCTT GATCAGATCT TGATCCCCTG 180  
CGCCATCAGA TCCTTGGCGG CAAGAAAGCC ATCCAGTTTA CTTTGCAGGG CTCCCAACC 240  
15 TTCCAGAGG nCGCCCCAGC TGGnCAATTC CGGTTCGCTT GCTGTCCATA AAACCGCCCCA 300  
GTCTAGCTAT CGCCATGT 318

20

(2) INFORMATION FOR SEQ ID NO: 1174:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 206 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1174:

30 GTTTTAAAGC GGTATATAAG GTAAATATGC AATATTATAA ATATCTTCTT CAGAACTAAC 60  
CGAATCTCTT AAATCATCT GTTTAGATAG CGTTTCAAAT TGATAAGTTT TAATTTTAAC 120  
CGTTACAGTT TTAGCTGACT GCTGTAATTT ATTTGACGTG CAGCTGTTTT CCTGACAATn 180  
35 CCATACTGTC TTAAAnCTCT GCATCA 206

(2) INFORMATION FOR SEQ ID NO: 1175:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 653 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1175:

TCTGCATCAT GATATTTTAC ATCATCACTT ATAAGAACGT CACCTACATT TAACTTTCA 60  
50 TCTAAAGCTC CAGCAGAACC TGTATTAATA ATGACGTCCG GTTTAACTT ATTAATTAAT 120  
AATGTCGTAG AAATTGCAGC ATTAACTTTT CCAATGCCAC TTTGGGTAAT CACTACTTCT 180  
CTATCTTTTA AAATGCCAGT ATAAAATTTA ACATGTGCAA CTGaAATTC GCTTAATTGT 240

55

TTTTGATTCA CCTCTTTTAA AAAATCCTAG CATTTGTTAT TTTATCACAT TTTAATCACT 360  
 ACAACGACAA GTATCATGAT TTTCATTACT GTATAAAACT TTGCTTTAT TTTTATAAAA 420  
 5 AGCTCTTTCA ATAACTTGGT ATCATAAATA ATTATTTTGG AACTCATAAC AGTGAATTCTG 480  
 ATGCTTCTAA TTGTCTATT TTTCAAAAAC TAATCATATC AATTACATCA ACCAATCGTG 540  
 10 TCAAGAAACT TTATTAAATA ACAGGAAAAT GATATGTTTA AAATAATAAT GATGAAATAA 600  
 GAGGATTTTA CAATGGCTGA AAATAATCAA AATAGTCTCG TAACAAAGAT AGC 653

(2) INFORMATION FOR SEQ ID NO: 1176:

15 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 410 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1176:

ACATGGCCGT TnGnATCAAG ATCGTCAACG ATTGATTGGT ACAATTGAAG TGCCTATGAC 60  
 25 ATTGGCAACC GTTGGCGGTG GTACAAAAGT ATTACCAATT TGCTAAAGCT TCATTAGAGC 120  
 TACTAAATGT AGAGTCAGCA CAAGAATTAG GTCATGTAGT TGCTGCCGTT GGTTTAGCGC 180  
 AAAACTTTGC AGCATGTGCG GCGCTTGTGT CAGAAGGTAT TCAACAAGGT CATATGAGTT 240  
 30 TACAATATAA ATCATTAGCT ATCGTTGTAG GGGCAAAAGG TGATGAAATT GCTAAAGtAG 300  
 tGAAGCTTgA AAAAAGAACC CCGTGCAAAT ACACAAGCAG CGGAACATAT TTTACAAGAA 360  
 35 ATTAGACAcA ATAGTAAAgG CGAtAGCGAT TaaAGAAAGT TAAGTCAGTC 410

(2) INFORMATION FOR SEQ ID NO: 1177:

40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 146 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1177:

CATCAAGATA ACTACGGTTA TAATCCAAAC GACCCAACAT CATATAACTA TACTTACACT 60  
 50 ATTGATGGCA CAAGGTAACT ACCATTACAC ATGGGAAAGG TAACTnGCAT CCAAGTCAAT 120  
 TAAACCAAGA TAATGGCTAC TACAGC 146

(2) INFORMATION FOR SEQ ID NO: 1178:

55

(A) LENGTH: 225 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1178:

10 TGTTCCTGGT GGAAC TTTGG TTTCTTAATG TCATTCCAAA TTGCTGTATA TTCATTTCATT 60  
 GGTATTGAAC TTATAGGTGT ACTGCTGGTG AACGAAAGAT CTGAAAAAAC CTTACCGAAG 120  
 CAATTAATAA TGTACTATCC GTATTTATAT CTATATCGTG GThATATAAT ATGTCATCAA 180  
 15 CTGGATnTAC GTCAATAGAC CTTTCGTAACC TTAATATCGC GACAT 225

(2) INFORMATION FOR SEQ ID NO: 1179:

(i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 319 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1179:

TGTACGCATA TGGTATCACT TGATGACCAA TTCAC TTTGT CGAGAATAAC GTTATTTAAA 60  
 30 GACATTGATT TAAAGAATTG GTATTnCGTT AATTGTATTA GACTTTTCAC AGAAGTAGCG 120  
 ACAACAATGA TTTTCATCGTA ACACGTGCGC ATATnAAGCA TGGGAAAAGA CATGGnCTAT 180  
 TGACCTGGCC TTTTGTGCAC TCGTACGATT GGTCAAACGT GGCTATATTG AAAGTTTGAA 240  
 35 ACAAGATGCG ACGGACACAC ATGCACGGGT GGGGATAGAT CTTGAGTCTT ATTGAGACGC 300  
 TGTGACTGTG GCTGACATC 319

(2) INFORMATION FOR SEQ ID NO: 1180:

40

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 654 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1180:

50 TTTTATCTTG GTTTTGAAC AGATATGTGT AGTCAGGTAT AACATAATCA ATCCCTAATA 60  
 AGTTATCATC AGGGAATTTG ATACCTGCAT CGATAATGAC AATTCGTCT TTATACTCAA 120  
 CTGCATAAGT ATTTTACCG ATTTACCTA GACCTCCAAG TGCATATACA CCTACTTCAT 180

55

TTCGTAATCT AAATGTGCGC CCTCTAATTT AGTGATAAAT TCGATATTAA AATTACGATC 300  
 TTTCAAGTAA CGACGTACTT GTTCTTCTGT TTGAGCTTCA ACATAAAGTG ATTGTGTATT 360  
 5 TTCACGCACA ATTACCTCGT CTCTGTTATG TTGATAaAAA ACTTTAAATA CTGCCATGTT 420  
 AAAAATTCCT CCTAAGAATG TTTGTyTAAT TTATTGTTAA CCCTAGtAAA ATCGTATTGG 480  
 AGTATATATC GATAAATTCA TTCCAATCAT CTCTATAATG TAACTTAATA ACGATTGGT 540  
 10 TAATAACTAG GTTCATCATG TCGTTCATTT TAAAAATTA GTGAAATAAC ACTAAAATTT 600  
 CAGTTAAATC TTATTTTACA TGATGAATGA TAATAAATAA AGCAGTTTAT CTCA 654

15 (2) INFORMATION FOR SEQ ID NO: 1181:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 231 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1181:

25 CGGGTATATT ATAGACAACG TTTAAGGACT TCTTTTAAAC TAACTTGTTA AATGTTGCTG 60  
 TATTTTGTGA TTCAACACTG TAATATAGTT CTTCTGACGC TGATGCATTA CTCATTGTAA 120  
 TAGATATTAA AAGACTCAAT ATTATTaaC TAATAATAGC GCGCTTTATG ATTTTCATAT 180  
 30 TCTAATCTCA AATGAATTCC AGAACTTTAT ATGGTTCAGG TCGACAACA T 231

(2) INFORMATION FOR SEQ ID NO: 1182:

- (i) SEQUENCE CHARACTERISTICS:  
 35 (A) LENGTH: 245 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1182:

TAAGTTTATT AAGCTCTTGT CCGTTAGCAA TCACGCTACC GCTAGAAATT TGGTCAATTG 60  
 45 AACTTAGTAC ATTTAATAAG GTTGTCTTAC CTGATCCAGA AGGCCCCATA ATCGCACGAA 120  
 TTCGCCTTTT TGTATGTCAA GTAATATCTT AGGCTGAATG GTGCTTTACG AGTTTGAACA 180  
 GTGCCGAAAA CGCAAGCCCC TTGATATCTT AAATGTGGAG ACTACAACnC ATCAGTGnCA 240  
 50 CGGGA 245

(2) INFORMATION FOR SEQ ID NO: 1183:

55

(A) LENGTH: 490 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1183:

10 AGGTAAAGAT GATGGTGTAG AAGTTTATGT GCATTGCGAA GATCATGGCA TTGTATTTAA 60  
 TGCAAGTCTA CCTTTGTACA AAGATGCCAT CCATCAAAAA GGATCAATGC GTAGTAATGA 120  
 CAACGGTGAT GATATGAGTA TGATGGTGGG TACAGTGCTG AGTGGCTTTG AATATCGAGC 180  
 15 GCAAAAAGAA AAGTATGATA ATTTATATAA ATTTTAAAA GAAAATGAAA AGCAATATCA 240  
 ATATACAGGT TTTACTAAAG AAGCAATTAA CAAGACGCAA AACGTCGGGT ATCAAAATGA 300  
 ATATTTTAT ATTACATATT TATCAAGAAA TTTAAAAGAA TATAGAAAAT ATTACGAACC 360  
 20 ATTGATACAT AATcAATGAT AAAGAGTTtA AAGAAGGTAT GCAACGAGCT AGAAnAGAGC 420  
 TAAACTATnG TGCTAATACA AATACTGTAG CAACGTTGTT TAGTACGAAT GATGAAAGGA 480  
 ATAGAAAAGA 490

25

(2) INFORMATION FOR SEQ ID NO: 1184:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 153 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1184:

35 CTCGCATTTT AATAAATCAT ACTCTTCTTT TCTTGCATAC GAATTAGAAT AACTCGCGAG 60  
 ACCTATAAGT CTCTTTCCTC ACTAGATAGT TTATACTTTT GGTCnGTTGA AGTCAATAAT 120  
 40 TTTATCTAAA GCTATAAAAA ATCTTTTGAT AGC 153

(2) INFORMATION FOR SEQ ID NO: 1185:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 164 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1185:

50 TCATTTATAT ACTGTATCAC GCTATCTTTA GTATGTGTGC ATnATCATTG GTTAGTGCCT 60

55

AATGAACGTT ATATTTTAAT TCATGATTTA CTAAGACCAA CAAT

164

(2) INFORMATION FOR SEQ ID NO: 1186:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 143 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1186:

CACAAGTGAC GTCATATTAT AAAAGTCACT CGGTTTGCGA TACGTTCTGT CTAAGAAATA 60

GCGACGTGCA ATTTTCATATT TTnTATAAAC ATCCGTTGAA AAAGGACATA AAACCATGCG 120

TTGAACCAGG GTCTATACTT TCT 143

(2) INFORMATION FOR SEQ ID NO: 1187:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 209 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1187:

CGTACAAGTT AAAACGTTTA TACGATTACG AAAAACCACC GAAGAGTGAG AAAGATCCAA 60

TGGTTGTATA TGCAGTAAGT GCAGGATACA AATGGTTCTT TGCTTATCCA GATGAACATA 120

TAGAGACTGT TAATACATTA nCAATCCCTA AAGATGTCGT TTTATTAGCT CAGCATGAnC 180

ATACAGTTCG GTCACATAGT GTCAATTCA 209

(2) INFORMATION FOR SEQ ID NO: 1188:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 243 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1188:

TTGGAATCGC TGTCGACGGA TAGCAACCTG GATTGTAAAA ATAATGTTGG CTTTAAAAAT 60

ACCGTGGCAA TATTAAATGA ATAATCGCTG CTGAATATAC ACCCAATGCA CATTGAACTA 120

ACATAAnCCC ATTTGACTCA TCTACGCCCA CTATTGGCTT TATAGTCACT GAACTAAGCT 180

TAT

243

(2) INFORMATION FOR SEQ ID NO: 1189:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 527 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1189:

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CACCAGGCAT TACCATACCA GCACTCATAC CACCAATCAC KCTCGATAAC ATCAATACCG      60
AAAAATTGTG GCCAACTGCA AACATAAATT CTGACACTGA AAACAAAATT AATCCTATAC      120
ATATAATTAA TTTCTTCCCT AATTTGTCAG CTAGCGTACC ACCAAACGGC GATATAATCA      180
TTTGAGATAA CGCAAAAGCA GCAACTAGTA ATCCTAAATC ACTACCAGTT AATCCCAAAT      240
CITTTAAATA AACAGGCAAG ACTGGTATTA CTAAACCGaT ACCTAAAAAA ATCAAGAAAA      300
TATTAAATA TAAGACAAAA ATCTGTTTAT TCATATGCTC ACCTCTTTTT TCTCCATGTC      360
ATGCTTAAAG CTGTTATTCT TCTTTCCAC GACAGATTGC AATTCATGCT AAATATTCGT      420
AAAAAGTTTC TATATTGTAT TACAACATTG CTACATTGA CAATATTTTt TCTTTGTAAT      480
TATCACTATn TTCCATTAA TTGTATAATT AATGACATAT TnnAATA                      527

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(2) INFORMATION FOR SEQ ID NO: 1190:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 889 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1190:

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AAAACGTGGC AGTAATTCAG TGTATGTTCA ATATGATGAT ATTATGTTTT TTGAATCATC      60
AACAAAATCT CACAGACTCA TTGCCCATTT AGATAACCGT CAAATTGAAT TTTATGGTAA      120
TTTAAAAGAA CTGAGTCAAT TAGATGATCG TTTCTTTAGA TGTCATAATA GCTTTGTCGT      180
CAATCGCCAT AATATTGAAT CTATAGATTC GAAAGAGCGA ATTGTCTATT TTAAAAATAA      240
AGAACACTGC TATGCATCGG TGaGAAACGT TAAAAAATA TAATAAGATA ATAAAGTCAG      300
TTAACGGCGT ATTCAATTGT AAATCTTGTT GGATTTTAAC AAGATAACTA GCAAATGCAC      360
TGTATAGCTG GCTTTTTAAT TTTATTAACA AAATTAAATA TGACGCGTGA ATTAAAAAAT      420

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CTCTACAATC CTATGGCGCA ATTTTAAACA AAATATACTA AATtTGAAAT TGACAGTTTC 540  
 CATAAATAAA ATGCTATAAT TTCCTACTCC GTGAATCTTA TTTTGTTTTA AAAACAGTG 600  
 5 TAGCACAAAGm TTCAACTTGT TTCCTACACT GTTTTATAAA TGAATTATTT AAAATGCTTG 660  
 TTCAACCTCT TGTAATGTTG GCAAACCTATT AATAGCACCA TACTTCGTTG TCACTATTGC 720  
 AGCAACGCGA TTGCTAAACG CTAAAATTTC CTCACCTTCA TTTTCAAATA ACTGAGTTAA 780  
 10 ATTTAACACA TCGGTTGCTA AAATCCTGCT AATAACTGCA CCAATAAATG CATCCCCTGC 840  
 CCCAGTTGTA TCAACAGGTT TTACCTTATA GCCACTATGA TAATGATTA 889

15 (2) INFORMATION FOR SEQ ID NO: 1191:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 254 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1191:

25 AGTTAAAGGC GTTGAATTAA TGGCCTTCCC ACACATGACA TATAACAAG CGTGCGCCTA 60  
 TGGTCTGATA ACCAGATACA CGTTTGAATG GATTAATTGC GTTCTCAATT AGGCGTGATA 120  
 TGGCTTTAAA GATTThAGTC TGTGAAATG ATGGTGAATT AAAGCATTGC GCTAAAGGTG 180  
 30 CACTGACAAT ATCTCGTAAA GATATGGTGC TTTAACAGAT TTGTAACATC TATGGTCTAA 240  
 nGATACGGGG TTAA 254

35 (2) INFORMATION FOR SEQ ID NO: 1192:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 189 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1192:

45 GGCTCATAAG TTACACCTAA TGCATCTTCA TCTGGAAGCT GTGGTTTATC ATCTTCTAAA 60  
 TCAGCAGTTG GCGTTTTTTC ATATAATTCC TTTGGCGCAC CAAGATACGC TAATAATTGA 120  
 GCTGTGTATh CTAGGCATCC ATACCGTATT CGTTAAACCA GTATATTCA GCTGAATGAT 180  
 50 CTGTCCTAC 189

(2) INFORMATION FOR SEQ ID NO: 1193:

55

(A) LENGTH: 215 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1193:

10 TTGATATTGA TCGATGACCG GTGATGTGAA ACTGAAACTG ACCAATGAAT GAAAAAATGG 60  
 GCAATGTTTT TGACAACAAT GGTCATTTAC CAAATAAAAA TATTGnCACc ATTAATACCT 120  
 GnCAAACGTG TTTGTTCTTA AACCTAAAAT GATAAATCCT ATTGAGATTA TGGACTTGGT 180  
 15 AAGCTGCAAT CTTTTTAATA TCTTTATAAG CAATG 215

(2) INFORMATION FOR SEQ ID NO: 1194:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 158 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1194:

AGAATTTGCh ACTGGTTTAC CAACGCATCT ATGTTGGTC GCTATACCGC ATACAGATGT 60  
 30 CGAACATATT AACCATAGAA CGTAGGTGTG GTGTTCTAGA AAAAGAAGTG CCGTTATTGA 120  
 AATGGGACAC TTGATCAACA GCCGAGTGAA ATCGTTTT 158

(2) INFORMATION FOR SEQ ID NO: 1195:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 180 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1195:

45 ACTGATTGCC GTGTCTGTGG TTGATCATTG ACTAATTGTT GGCCATCATT GGnTTCTTGG 60  
 TCTAATAGTC CTCTTGCTCC TGCGTCGTAA CATTGATGCC AATCATGCAC CACAGCCTTT 120  
 CGGTTTCATCA TAACATTTCT GCCAATGTCT CTACATGACA CGGGCTCATA TTTCTTTCTG 180

50

(2) INFORMATION FOR SEQ ID NO: 1196:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 274 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1196:

5 GTTAAAGCGA ATTATTCACA ATATAAAAAA TCATCTGATC AAGTCGTATT AGAATTAGGT 60  
 ACAAATGGCG ACTTTACTGT CAAACAGCTC GACGATTAC TTAATCAATT TGGaAAAGCC 120  
 AAGATTTATT TAGTTAATAC ACGTGTTCa AGAaTTmTG AGGgCAAATG TAAATCGATT 180  
 10 ATTaGCTGAC GCGGgCGAAA CGGAAGTCCC AATGGTCACA TTAATTGGAT TGGGTATTAG 240  
 GCGCTTCACA AGGGACCTTG GTGGAATATT TTTG 274

(2) INFORMATION FOR SEQ ID NO: 1197:

15 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 154 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1197:

25 ACGTAACCTA TATTCATCTC TGTTCCCAAT AATAATAACA ATACATAACT GATATTAGCT 60  
 GTCTTTCATC TCTAATTAAT ATGCGTCATG AGCTAATATC GGTATTATTTT TTGTGTCAAA 120  
 nAATTTTAT TTTATCTCTC CATCGCATTA ATTG 154

30 (2) INFORMATION FOR SEQ ID NO: 1198:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 249 base pairs  
 (B) TYPE: nucleic acid  
 35 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1198:

40 AATCCTCACC CGTAATAAAC TCGTTTTGAA TCGTGTGTTT GAACTCACGG TATATTAAAG 60  
 CAATATCCTC TAACTATTTT TTAGTTCGAG TTTGCATATT TTTATCAGCA ATAAAGTGTT 120  
 45 CTAAATGTTC AGGCGTTACT GCATATTTT TAAAATCTTG AATTGTTCCT GTTAATTTT 180  
 CACTAAACCC ATAATATTTT GCTTGTGATT GATAAAGTTT TAAATACTTT TGTTGTTcT 240  
 GAACAATGn 249

50 (2) INFORMATION FOR SEQ ID NO: 1199:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 165 base pairs

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(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1199:

TTGGTAAAAA TCGACATCAA ATACTAAATC TGATCCATCT GAATCCCATG TTAAAAACCG 60  
AACTTGTGCA TTAATTGTAA AGTTCAAACCT CTCATCTTC ATAGATCGCG ATGCGTCTTT 120  
TAATTCTTTA GGTGATACTT TGTAGATCTA TAACAAAATT AnCTA 165

(2) INFORMATION FOR SEQ ID NO: 1200:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 236 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1200:

TTATTAGCGA TTAAAAATAT GTCCTTTTTT AATAAAGGAG ATATATGTTT AATTGGATGT 60  
CAACATCGGA GTCATTGGCG AAAAATAGGG CTGCGGTCTGA TGGAGTTCAA AACTATTTTA 120  
ATGCATTACA TGTGTGAGT nAAGAGCAGG CGTACTTTTC TTTCAAGGA TGTGACATAT 180  
CACAGAGCGT ACAATAGAAA CTCAGATACC ATTACATGGA nAGTCCGCGT CCAATG 236

30

(2) INFORMATION FOR SEQ ID NO: 1201:

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(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 146 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1201:

TAATGCTAAA CAGTATTATG GAGATAATGG CTTAGTTCAA ATTTCTGATG nAAGTCAACA 60  
CTTCTAAAAT TTGTAAATGA AGCATTAGAC AATAACGAAC AATCAGTTGA AGATTACAAA 120  
AATGGTAAAG GCAAAGCTAT GGGCTT 146

45

(2) INFORMATION FOR SEQ ID NO: 1202:

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(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 385 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1202:

|    |                                                                    |     |
|----|--------------------------------------------------------------------|-----|
|    | ATTGATGATA GTATTGATGG TAATACCATA AACATACAGC ATTATCACAA GTAAAAGTAA  | 60  |
| 5  | GCCTAAATGT CCATAAAATC TACTTGTCAC AATATATGTC GGTATTATCG TAACGGGAAG  | 120 |
|    | TCATTTGCGTA CTTGATTAAA CTTTGTGTGA ATTGCTTTAG TACCTTCTAA ATACCTGGTT | 180 |
|    | GATGAGACCA CATACTGATA CCACCATAAC CATAAACAAA AGGTACACCA GAATTGGGCA  | 240 |
| 10 | TACTTCTTAT TCCATCCAAA CCTCCGTAAC CTAATTGCTA CGGGTAATAT TCCAGCACAC  | 300 |
|    | TAATAGTATT GATGTAATTA ACTGAACGGC CGCTnGATAA TAAGTCTTAC AGTCTTAAAC  | 360 |
| 15 | GTCCATGCGC ATCnTnACCC ATTCA                                        | 385 |

(2) INFORMATION FOR SEQ ID NO: 1203:

(i) SEQUENCE CHARACTERISTICS:

|    |                            |
|----|----------------------------|
|    | (A) LENGTH: 580 base pairs |
| 20 | (B) TYPE: nucleic acid     |
|    | (C) STRANDEDNESS: double   |
|    | (D) TOPOLOGY: linear       |

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1203:

|    |                                                                    |     |
|----|--------------------------------------------------------------------|-----|
|    | ACATTGAACG AGTACAGAAA ACTTATTGnA AATAAAGGCT GTTAAAGATA AAGAAGAAGA  | 60  |
|    | TACTTACAGA GGTAAGTATT TTGCGGAAGA AAGAAAAAAC GAAAAATTGG AAAAAGAAAA  | 120 |
| 30 | TATAAACTA AAAAACAAAA TTTATGAATT ACAAACGAA GAAGATAACG AGGAGGACGA    | 180 |
|    | AGAAGACAAG GAGGACGAGA ACGATGTATT ACAAATTGG TGAGATAAAA AACAAAATTA   | 240 |
| 35 | TAAGCTTTAA CGGGTTTGAA TTTAAAGTGT CTGTGATGAA GAGACATGAC GGTATCAGTA  | 300 |
|    | TACAAATCAA GGATATGAAT AATGTTCCAC TTAAATCGTT TCATGTCATA GATTTAAGCG  | 360 |
|    | AACTATATAT TGCACGGAT GCAATGCGTG AyGTTATAAA CGAATGGATT GAAAATAACA   | 420 |
| 40 | CAGATGAACA GGACAACTA ATTAAGTTAG TCATGAAATG GTAGGAGGTA TGAnAAGTGA   | 480 |
|    | ATGATTTACA AGAGAGAGAA TTAGAAACAT TCGAACAAAGA CGACCGATTC AAAGTAACTG | 540 |
| 45 | ATCTAGACAG TGCTAACTGG GTTTTTTnAG AAACnGGAT                         | 580 |

(2) INFORMATION FOR SEQ ID NO: 1204:

(i) SEQUENCE CHARACTERISTICS:

|    |                            |
|----|----------------------------|
|    | (A) LENGTH: 139 base pairs |
| 50 | (B) TYPE: nucleic acid     |
|    | (C) STRANDEDNESS: double   |
|    | (D) TOPOLOGY: linear       |

55

ATCGTATGGT TGAGGCGAAT TTAAGTGAAG AATTAGACAA CGAATCTTGA TGAAAAGAnA 60  
 ATGATTGGCT AAAATAGCAG CTAATCAAAT CAACGATAAT GAATGCTTAT TTATCGTGCT 120  
 5 GGTTCATCTA CATTGGAGC 139

(2) INFORMATION FOR SEQ ID NO: 1205:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 229 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1205:

AGGAGGATAT CAGaCTTACA rACTATTCTT TATCATACTG rAATTCAAAT AGACACCTTA 60  
 20 ATTGaAGaAG GCGTTGACGC GCTACTTTTC rAAACGTATT ACGACCTnGG AAGnGTTAAC 120  
 AAATGTCATT TCCACGGAAC GGGGAAAGGA AATACGGCGT TGCCAATCCA TTGCTCCAAT 180  
 TGAACCGGTT GCAAAACACAA ATTGACTTGG TTGAAGGGGC AGGCATGCA 229

25 (2) INFORMATION FOR SEQ ID NO: 1206:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 399 base pairs  
 30 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1206:

TCGACAAGTT TTAAACAGTT CGTTATTATA TGAATGTAAG TAAAAATTTC TTAGCTACAA 60  
 CTTACATATT ATAAATGCAT AAATTAAACA AAAAGGGGCG AAAAAAGTTG ACTCATTTAT 120  
 40 CAGATTTAGA TATTGCGAAT CAATCAACAC TACAACCAAT TAAGGATATT GCTGCATCAG 180  
 TAGGTATTTT AGAGGATGCA TTAGAACCCTT ATGGTCATTA CAAAGCTAAA ATCGACATTA 240  
 ATTAAAATTa CGCCAAGAGa AAACAAAGGG AAgTTGTTTT aGTAACTGc GATGaGCCCCA 300  
 45 ACACCAGCTG GTGaAGGtAA tCmACGGTTA CAGTTGGtTT AGCTGaTGcA TTCCmTGaGT 360  
 TaATgAAAAC GTTATGGTTG ccTTaGGGGG CCTGCCTTT 399

50 (2) INFORMATION FOR SEQ ID NO: 1207:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 138 base pairs  
 (B) TYPE: nucleic acid  
 55 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1207:

ATAAACAATA CGATTGTAT GCTACTTGTC TGAAGACAAC ATAAACAAT ATGTTAACTG 60  
 5 ATATTGAGGA TATGGGCTTT CAAAATCCan TTCAAAAAAG GTTATGTTGA AATATGACGC 120  
 GGTGTTGAA AGAGACCC 138

(2) INFORMATION FOR SEQ ID NO: 1208:

10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 655 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1208:

20 AGTCGCCTAA CTTTATTAT CAGTCCAATC AGTTTCATCA AGTATAAATG TTATTGCTTA 60  
 TTTTGTATT CTGGCGTAT TTTTGTCT TCTGCATAGC GCTCTGGATT TTTCTTATAA 120  
 AAATCTTGGT GATAGTCTTC GGCTTTGTAA AATTGTGACG CTGGTA-TAT TTTTGTGCA 180  
 25 ATTGCCTTAT CAGCATTAAT CGTATTTTTA AGCTGCTCGA TATAAGTCTC AGCGAGTTCT 240  
 TTTTGATGAT CATTAGTGTA GAAAATAGCT GTTnATATT GAGGACCACG GTCTTGATAT 300  
 TGACCACCTG TATCTAATGG GTCAATGACT GAGAAAAATA TTTCTAATAA CTTATTGTAT 360  
 30 GAGAATAATG CAACATCATA TTGAATTCA ACAGTTTCTA AATGACCACT CGTACCTGAT 420  
 TTTACTTGTT CGTAAGTAGG ATTTTCAATA TGTCGCCCA TATATCCAGA AGTTACTTTT 480  
 TCTATGCCGT CAAAGGTGTC AAATGGTTTC GTCATACACC AAAAGCAACC TCCGGCAAAA 540  
 35 TAAGCTGTAT TAATATTCAT TTTTGACATC CTTTCCATTA GACCTTAGTA CGATTTATTA 600  
 AGAAATCACT TGCTTTTGA ATTGTTTTTA TATAACGTTA ATAnGnGATT ATnAT 655

40 (2) INFORMATION FOR SEQ ID NO: 1209:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 213 base pairs  
 (B) TYPE: nucleic acid  
 45 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1209:

50 CCGnCCCCAA TGGAAATTAC CTTTGGTnCC CCATTTTAAT TGTTAAATTA TTGGAGTGTT 60

55

AATCTCACTA TCTTCAAATA AGCTTGTGTA TAGTTTAACA GCTTCTTCAG CTTGGTTATT 180  
 AAACATTAAA AATGTCGTGA TTTTGGGAAT ATC 213  
 5 (2) INFORMATION FOR SEQ ID NO: 1210:  
 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 149 base pairs  
 (B) TYPE: nucleic acid  
 10 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1210:  
 15 TTGATTGCAA CTTTGATAGT GAAAACATTT ACATGATGTT GTCACTGGTG CACGGGCGTC 60  
 GAGAACAATC ATTGCGTTAT TGACGGTGCT GCCCTGCTGT CTCAGTTTGT TGATGCAAGC 120  
 20 ACTACACGAA ACCCAATAGC nTCACCAG 149  
 (2) INFORMATION FOR SEQ ID NO: 1211:  
 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 142 base pairs  
 25 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1211:  
 30 AATGTTTCTC CTAATTTTAA ATGTTTAGGA ATATTAATA GGATAATAAA TCCAGCGACA 60  
 TCCCAAATGG GATTCAATATA AGAATGTTGG ATGATAATnT TGGCCGTTAA TATACATATT 120  
 35 TTCTATTATA AAATTGGGCA AA 142  
 (2) INFORMATION FOR SEQ ID NO: 1212:  
 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 163 base pairs  
 40 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1212:  
 TTTAAATTTA GTCACCTTCAC CTTTAAAGC ATGTTCATAA AATGTTTGCA TCATCAATGC 60  
 50 ACGTTCTGAA CCAGAGCCTT CAACACAAAG ATAAATTTGT ACAGCAATAC CGCCTCTAAC 120  
 TCTTCGTTGC GATGATGGCA ATACCACTCA ATCCAACGCT CnG 163  
 55



(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 765 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1213:

```

GTCACCTTTC ACGTCTTGAA GAAAAAGGCT ATATAAGAAG AGATCCAACG AAACCACGTG      60
CTATAGAAAT TGTAAGTGAT CAAACAAATG ATAATATTAA TATGGAAGAA ACGATTTCATG      120
TGCCAGTTAT TGGTAAAGTC ACAGCAGGTG TTCCTATTAC CGCAGTAGAA AATATTGAAG      180
AATATTTTCC ATTACCTGAA CACTTAACAT CGACACACAA TAGCGACATA TTCATATTAA      240
ACGTCGTAGG CGACAGTATG ATTGAGGCTG GTATATTAGA CGGAGACAAA GTAATTGTnC      300
GCAGTCAAAC CATAGCAGAA AATGGAGACA TTATTGTTGC TATGACTGAG GAAGATGAAG      360
CAACTGTCAA ACGCTTCTAT AAAGAAAAAA ATCGTTATCG ATTACAACCT GAAAATAGTA      420
CAATGGAGCC AATTTACCTA GACAATGTTG CTGTAATTGG GaAAGTAATT GGTTTGTACC      480
GCGAAATGTA ATATTTTAAA CCGTTATATA TTATCGTAAT TGTTAAGCCC TCATTTTAT      540
AAATTTTGGG nCTCTTGAAA AAGTTACGTT TTCAAGAGGT TTTATTTATT CTAATCTAAA      600
TTCAGTTCAA ACAGAAATG CGAATTGTTA GATAATCTCA TTCTTTA-TA TAAATnTTGA      660
ATTACAGATT TCTGCAAAAT GTTACACAAA TTAAACTCG CCCCCGTAAT AATTTACAGG      720
AGCGAGCCAT TATTATTTT TTCTnTCTTT TTTATTAAGT ATATC      765

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(2) INFORMATION FOR SEQ ID NO: 1214:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 495 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1214:

```

AGTTGCCATC AAAAATACAG AACCTAATnA TnACCTTTTA TGATTTTTTG TGAATTCAAA      60
GTCACCTTCT TTTTnAAGCT TTAAATTTCT CCCCATTTTT TTAGCCCCCT ATAAGGATTG      120
AATATCAATG CCTTCTTTCA TTAAATTTCT TCTAATTTTC GAAACAAATA ATAATGCATG      180
TTCTCCATCA CCATGCACAC AAATTGTATC TGCTTGTAAC GTTACTTCCT TATTGTTTTT      240
TGAAATAACT TTATyyyCct TCACCATCTT TAAACCTGC TTAAGTGCTT CGTCAGTATC      300

```

ATCAGCAAAC ACTTCAGAAG CTGTAATTAA TCCGACATTC TTTGCTTCTG AAATTAGATA 420  
 TGAATTGCT AATCCTACTA ACACTAGTGA TGGATCAAAG TCATAAACAG CTTGTGCTAT 480  
 5 AACGTTTGCh ATTnC 495

(2) INFORMATION FOR SEQ ID NO: 1215:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 243 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1215:

AnTGTCCAGG TACCCGTGGT CCAAATTCG ATGTACGTAG ACCATTGnCT CGTATTTGTC 60  
 20 AGATTGTGTT AATGATTGTC TCTGTATTAG GAAGTTTATT CTCCATTTTA ACAATTAGAA 120  
 AAATAGATCC GTTAAAGGCG ATTGGGTAGG AGGTGTGCAA ATGTTGAAAT TGAAATGTAC 180  
 AAGTCATTAA GTGGATCTAC ATGAGCGTAA GGTCATTGGA ATAGGTTTGC TGTGACTCGC 240  
 25 CGA . 243

(2) INFORMATION FOR SEQ ID NO: 1216:

(i) SEQUENCE CHARACTERISTICS:  
 30 (A) LENGTH: 256 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1216:

GGGCTTCTTT CTAAAATAAC TAAGTGAATT ATCTATATAT GAAGAGGTCT CCAATACTTT 60  
 40 TTATATAATT CGTGATTACA TTCTATACTT TTAATTGTAT TTTCTGCGTA GGAAAGTGGT 120  
 TTTATTAATT CGATTAGTTC GAACTACAnT CAAGAAAAGG TAAAATTTGT GCATGAGCAA 180  
 GAGAAACATA CCTGAACCAA AGGCACCCGA ACAGTACCTA GGCCTAAGCG GCTAATTATA 240  
 45 AATGCTCAAG CGCAnG 256

(2) INFORMATION FOR SEQ ID NO: 1217:

(i) SEQUENCE CHARACTERISTICS:  
 50 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1217:

```

5  TTTATTTTT CTCTAAACG AAACATTGCT TCTTTTGTG ATTGTTTGT ATTCTTGTC      60
   AACACAACAC TTACGCGCTT CCATTATCT GTGTATGGAT CTTTATACTT CTCGTAGTAT      120
   CTGTATTTAG TTTCGTTATT TTTGTTTTTA AATTTTTCAA TCCACATGTT TATACCTCCT      180
10  GAGAGAACGT ACGTTCTGTA AATTGTGAAA AAATAATAAG GGTAGGTGGG CTACCCAAAA      240
   TTTAGTACTA GGTACTAAAT ATGTTATAAT AAAATAAAAA GTAGGTGATA AGATGACTCA      300
   ATTTCTAGGG GCGCTTCTTC TTACAGGAGT TTTAGGTTAC ATACCATATA AATATCTAAC      360
15  AATGATAGGT TTAGTTAGTG AAAAAACAA GATTATCAAT      400

```

(2) INFORMATION FOR SEQ ID NO: 1218:

(i) SEQUENCE CHARACTERISTICS:

```

20  (A) LENGTH: 400 base pairs
     (B) TYPE: nucleic acid
     (C) STRANDEDNESS: double
     (D) TOPOLOGY: linear

```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1218:

```

   CCAAGTGTC ATTTTAGATG ATTTTTTGTG TGACCTATCG CCTTAACTGA AGAAACTGAT      60
30  AAATCATCCA TTTCAAAAAT AGGTCTAGAA AAATCTGTTC CGAAGGtCTT AAACGATTCA      120
   TATCACGAAT ATTTTAAATC GTTATATCAT TTTCTGTAA TAATACATCT ACTTGCTTTA      180
   CGGGATCTAA CGAAGTGTT TTAGATAATT CTTTCATCCA TTTATTTAAA CCTTCAGCTA      240
35  ACGATTCTAT ATTTTCAATA TCCATCGTCA TACCTGCAGC CATATGATGG CCGCCAAATT      300
   TAGCGATTAA CTCTTGATGT GCTGATAGTA TTTCAAACAT CGACACTTGA TCAATTGATC      360
   TGGCGGAGCT TTTGCATGAT TTTGCTCCCT ATCAATATTT      400

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(2) INFORMATION FOR SEQ ID NO: 1219:

(i) SEQUENCE CHARACTERISTICS:

```

45  (A) LENGTH: 458 base pairs
     (B) TYPE: nucleic acid
     (C) STRANDEDNESS: double
     (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1219:

```

50  AAGATATTAG ACATAAAATC TAAAnACAGC AGTAAGATGA TTTATGATTA GAAACTATCT      60
   TACTGCTGTT CACTTTTTAT AATACTTCTG AATGTCTTCA CTTATACTTC TAGTCACAGA      120
55

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GCATTCATTT CTTGTcTAGC AACGTTCTAC TCTAGCGGAA nTAAtTAGCT ACCATCCTCG 240  
 CTAAGAACCT TTCTTGACTT GTGACAATCG CTTGCTTCTT TCCTCTCCTT CGGcTCTCGC 300  
 5 TTACTCATTT AGCTCTACTA AACTCGTTGC GCTCTTTTCT CGTTTCGTCA GATTCAAACG 360  
 TTTTCACTTC GCCAAGCCAT TTTTCTTTGT GTTTACTTTT TATTTTGACG TTTTAGACAT 420  
 10 AAAAAAGAG ACCTCACGGT CTCAACTTGG CCTGGGCA 458

(2) INFORMATION FOR SEQ ID NO: 1220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1220:

CAAAATTTAT TTCTTGTAAG GTACAATATA AGTTAAATGT TGTGTTAGG ATTGATTCTT 60  
 25 TCATCTGAGC ATTAAATTGT AAGTCGCTAT ATTTAATTTG TTCAGTATTT AmAAATAAAT 120  
 TGAAAAATTC AACTGATAAT AAAGGTGTTT TAATCATACA AATACTTGAC GGTTTCGTAAA 180  
 TAGTGTTTAT TTGTAAGCAC CTCACATATT TGAATAGACA AATAGAGCCC TTTCAGGCTC 240  
 30 TATTTGCTGT AATCTTAACA GCAGAAGCTA TTAAACTAC CAGTCTTAGC ACAACCAGGA 300  
 GTACATAAAC TATGACTTGT AATACGTTCTG TCACCTGCTG AATCATTGTA GTnATTGTTT 360  
 GCTTTAACTT GCACGTCTAA ATCAAGAACT TTTTCCATAG ATAAAACCTC CTATTATTAG 420  
 35 TTGAAGTTAA GGCTACTTC AATTGTCATA TTATCCCTTT TCACACAACA AATCAATAAA 480  
 TTATATAATT ATAT 494

(2) INFORMATION FOR SEQ ID NO: 1221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 148 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1221:

ACTATTATTT TAATAGTGAC GACAGTTTAA ATTTTATTAA GTATTGCTTT AATTACCTTT 60  
 ATGCAATACT ATTTACACA AGAnACCGAA AATGCCATAA GAGAAGATGC TAGACGTATA 120  
 55 AGTTCACTGG TCGAACAATC ACATAATA 148

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 401 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1222:

TCGCTTTTAC ATCAAATAAA TTATCTTTAT ACAATTTTCGT ATGAATTACT TCTTTATAAT 60  
 TATAAAAATG AGGAATTTTT TGATTGTTTA ATTCATTGTC TAATTGATTA GCTTTTTGTT 120  
 GGTCTTTAAT TGTAACGTCG TGTGGTGCAG TATATTTTAT TTCATTGAT AAGGACGCTC 180  
 TACTTATAGC AGCAAAGCAA AGAACTGAAA CAGTAATCGC TGAAATGATT GCCATGACCG 240  
 TAAGTGAAAA AGCATTTTTC TTAATACGAT ACATAATAGA TGATGAGAAC ATGACATCAT 300  
 TtACACTTAT AACACCTTkt CTAAACTtCT TCACCATTTT AAAAAGTAGA GArACAGAGC 360  
 TTTTAAAAAA TAAGnGTGCC CCAATCACAG TTGACAAAnAA A 401

(2) INFORMATION FOR SEQ ID NO: 1223:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 176 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1223:

CTTGACCAAA TCCATTTTTT AACAAAAGTG GTCAAGTGAA ATCCCATCTT TCCAAATCAA 60  
 AAAAGAGCTA AAGCAAAATG CTCTAGCCCT TGatATTACT GATTTCCTCAT CATTGTnTAG 120  
 CGTATTAATA TTGCTTCATG TACTGATCTC TTTCCCATTC AGAGACTTGA GTTCTG 176

(2) INFORMATION FOR SEQ ID NO: 1224:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 283 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1224:

AATACTTTTA CGATAATTAT AAAGGTTTCAT TCAAATCTTA GGGCAAAATG TATAATATTT 60  
 TTATGCAAAT TTAAAACAnT AACACTTATT TCAAGGTTCA ATATTTTGAG AATAAGGAGT 120

AATGCCAATC AAACGCTC GAAATAGGGG GAAACGAGGC nATCATTTTT GACAATGAGT 240

GTCAATAGGG AAGAATAACA ATTAGGAATG ACTCATAGGA GGA 283

5 (2) INFORMATION FOR SEQ ID NO: 1225:

(i) SEQUENCE CHARACTERISTICS:

10 (A) LENGTH: 217 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1225:

AAAAGAAGAG AAGAAAGTTG AAGAACCTCA AGCACCTAAA GTTGATAACC AACAGAGGT 60

TAAACTACG GCTGGTAAAG CTGAAGAAAC AACACAACCA GTTGACAAAC CATTAGTAAA 120

20 ATTCCACAGG CCATTACAGG AATTTAAGTC GGATACCACG TGAATnACGT CAGGATGTcn 180

GCCGTTTACA TGACACGCTC TACATATTCA CCACTCG 217

25 (2) INFORMATION FOR SEQ ID NO: 1226:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 176 base pairs

30 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1226:

35 TGGGTACTAT TTATTACGTA AAACTTTTCG TTAGCGATGC CGGCATTGCA AGAGCAAGGT 60

TTACAAAAGC GGAAGTAGTT TGCACTTTCT GCTGTTCCAT CGCATATGGA TTAGTAAGGT 120

40 CTTTATGGGn ACTGTAAGTG ATCCGAGCAA TGTCGGATAA TCTAGGTCTT GGATAG 176

(2) INFORMATION FOR SEQ ID NO: 1227:

(i) SEQUENCE CHARACTERISTICS:

45 (A) LENGTH: 400 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1227:

AATGAAAATA AAGAAGATGA TTTGTTGCA TATGGGTCTC CAGAACATAA TTATCAATTT 60

55 GGTGGAAGTT TAATCAAAAG TAAAAATTTA AGCACGTTAT TAAAACCAGT ACATCAAACC 120

GCGGCCGTTT TAATTTTGTT TTCAAGTTAA TCATACTTAC ATATAAAAAAT GAAAAGTTGA 240  
 ATTTTtagTA CAATTTCCAC TGTATTATC TGTTAACCAC TTTATACCCG CAATATTTTCG 300  
 5 TTGATCTTAT ATAAACACTT TTGGCTGCTT TTCCTTGACC TAGATTAAAA TTATAGATTT 360  
 TCCTTGTAAG AGTGTGTTTG TAGTATCATA AATATGTAAA 400

10 (2) INFORMATION FOR SEQ ID NO: 1228:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 150 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1228:

ATCTAGCATG CTTTGGAAA ACGATAAGAA TTTGGTGTTC GAATTTTCATA ACCAACACCA 60  
 GCAGTTTCAA CAACTACGTG TGtagGATAT AAATGTGTTA CTTGACCTTT GACATACGCG 120  
 25 TACATTATAG GCACATCCTT ACATACTCAn 150

(2) INFORMATION FOR SEQ ID NO: 1229:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 138 base pairs  
 30 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1229:

TCGGTACAGT GCATTTGGTG CGTCATGGTT TACAAGGnAA AAATAAGTGA TCACTATTTA 60  
 TCAGTATGGG AAAAAGCAAC GACGTATCAA ATGTACCATG GCTTAGCATT ATTAATTATA 120  
 40 GGTGTAATTA GTGGTACA 138

(2) INFORMATION FOR SEQ ID NO: 1230:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 182 base pairs  
 45 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1230:

TTGGTATGTA CCTCCAATAG TAATTTCAAT AACTTTGTCT GTTGAACACT AAGAGCAATT 60  
 55

## EP 0 786 519 A2

CCTTGATTAT nCTAAGAAAA GTAAAAGCAC ACGGAGTATC CTATCAGAAA ACCAGTATAC 180

CA 182

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(2) INFORMATION FOR SEQ ID NO: 1231:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 233 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

10

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1231:

TCTCTTAAAA TTGTACACAA TTCTGGATAA CTATCCCCAT TTCTGTGGAT AAACACCTTG 60

ATGTCTTATT ACTTATCCTC GTTTTATAT CCCATATTTA TCAACGGkTA TCGCTTTTTT 120

20

TCATAAAAAA aCACTACCGT ACCyCTTATT TAAGAAATAC AGTAGTATTA TTTTCAATAT 180

ATTTTAGCTA GCnTTTCTAC GTCGTACAGT CGCGATTAAA CCTATACCTG CTA 233

25

(2) INFORMATION FOR SEQ ID NO: 1232:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 385 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1232:

35

GTTTTTGTA AAAGTACTAA TATTaCCAA GTATTGAGTC ATATGTTAAA ACAAGATGCG 60

AATGATATTG GCTTTGCTAA ATTACTACAA AATGAGAATA ATCGTATGAG TTATAACGAG 120

40

TTAATGAGTG AATGGCAATC ACATCAACGT GCATTTTTAG AAGAGTTGAG GCATGTTGAA 180

ATGTTAAAAG AAGAATCTAT TAGAGCATAT GATGTTTATA AAAATTGTGA GTCTTTCTCT 240

AAGATTGAAC AGGTTATTAA TAGTGAAAAA ACAAGTATTG AAGAACAGGT ATATCATTTA 300

45

GATAATGAAA CGTTACGAGA CAATAAAGAA ATAGAAGTTT GGGATAATCG ATTTAATTAn 360

ATTGnTAGCC CAATGGnCCC TTAA 385

(2) INFORMATION FOR SEQ ID NO: 1233:

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(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 180 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1233:

CTGAAAAGAT TCAACTAATC TGAGTCAGGT TACAATCTCA TGATAACCGC TCGCACCTCG 60  
 5 GAGAAAGACG CTCAAACAGT ACAGAGCTCG ACCGCAGGAT ATTTTGTG AAAATGAACG 120  
 TATGAGCTGT TCAGAnGGCA CTTTATTGCG CAATAAAACG GTAAAAATCC TGAAGTGAAG 180

(2) INFORMATION FOR SEQ ID NO: 1234:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 453 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1234:

20 ACCATTTTAA TTTnChTTAT GACCTGTAT GCCATTATCA aCAGTTATGA TTAATGTTAT 60  
 GCyTTCATCA TGAGCATTTT TAAATGCTAG TTCGTTTGGT CCATATCTTC GGTAAAGCGG 120  
 TTAGGAATAT GCCATCCTAC TTGTGCACCT AAAAGTTGTA ATGTTATCAC TAAAATTGTA 180  
 25 GTTGCGGTAA CACCGTCGGC ATCGTAATCA CCATAAACTA GGATTTTCTC ATCATTCGCT 240  
 ATCGCTCTTT TAATTCTTTC AATAGTCTTA GTCATATCGC TCAATTGnAG TGCATCATGA 300  
 TTGATATCTG TATCTGAAAT GATGGATTCT ATTGCTTGn CATCAATAAT CGATTTACTT 360  
 30 nCTAATATTT TTTTACGAT TGGCGTTAAC TTTAATTTG ATGTTAATTC ATCACTTATG 420  
 TATTCAGCTG GTTTAGTTAA TTTCCACTTA TAC 453

(2) INFORMATION FOR SEQ ID NO: 1235:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 163 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1235:

45 CGTGATTAAG TTGGATACTA AAATTGGGA TGTTAGAGAA TGTGATGAAG ATTTnCAGCA 60  
 ATGTCCTGAA ATTAATGAAA TAAGAGACAT TGTTTTAAAG CGGTGGTTTG ATAGGTTTAC 120  
 50 CAACTGAAGC AGTTTATGGA CTTGCAGCGA ATGCGGCAGA TGA 163

(2) INFORMATION FOR SEQ ID NO: 1236:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 144 base pairs  
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(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1236:

GTTAACACAT CGCTTATAAC GTGTAAATAT AAACACTGTT TTATAAAAAC TTTTATACC 60  
ATTACCGGCA CCGATAAATG TGTACTATGG AGCACAAACAA TAACTGGAAT ACTTnGATTT 120  
AATCCCGCTA TAACATTTCC TAAT 144

(2) INFORMATION FOR SEQ ID NO: 1237:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 204 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1237:

ATAGTTTAAG GTGATATTCA AACAATATTA GGTTTGATTT AACTATCAAG CATCTACTTT 60  
GTCATGTTTA ATACCAGCAA ATAATAAAAT CCATGTCACG ATAATAAATG GCATGTTAAT 120  
GCAGGGTAAG CCCAACCGGT CCAGCCATGG TGGTGGTACC CTAnTTGGCC nCCACCTACC 180  
GGTTAATTAA CCACCCCCAA AAAA 204

(2) INFORMATION FOR SEQ ID NO: 1238:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 157 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1238:

CGGTCATTTT GGTTATTnAA CAACTATACC TGAGGGGTGG TGGGTAATTC GTATTGCCGA 60  
TTCAGTTTGG TTAATATGCT GACCACCTGC ACCAGAAGCT CTGAATGTAT CAACTGTGAA 120  
TAGCATCCGG ATTGGTTTCA ATCTGCTATG GCATCAT 157

(2) INFORMATION FOR SEQ ID NO: 1239:

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(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 164 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1239:

TTAAAGCATG TTCATAAATG TTTGCATCAT CATGCACGTT CTGGACCGAG CCTTCAnCAC 60  
 AAGGTAATTT GTACAGCATA CCGGCTCTAA CTCTTCGTTG CGTATGCCTG CAATTTCTTA 120  
 CCTCGATACT TAAGTCAATT TTCCGGGCAT AAGGGTGTTT ATTT 164

(2) INFORMATION FOR SEQ ID NO: 1240:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1240:

TTGAAAAACT GAAAACGGTG AAGTTTACA AACAACTAAA ACAGATAAAG ATGGTAAATA 60  
 TCAATTTACT GGATTAGAAA ATGGAACCTTA TAAAGTTGAA TTGAAACACC ATCAGTTACA 120  
 CACCACACAA GTAGTTCAGA ACTATAAGTT GATCAATGTC TCACACAGTG CATAATnGAA 180  
 CAACATGCCG GTCTCAACAC TCACTAGGCA GAGGATCATA ACGGTCGTnG TAAGCTCGG 239

(2) INFORMATION FOR SEQ ID NO: 1241:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 152 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1241:

TGATAAATAA TAGCGCCATC ATAAGTTGCA GGGTGTAAT CATAATTTCT ACCATGAGTC 60  
 TTTGCCTTGA AAGACCGTGC ACCACTTTCT TTAAATCGG TAAACGATAA TGnCAAGTTT 120  
 AAAATAATTT GGC GTGTGG CATTTGAGTA TC 152

(2) INFORMATION FOR SEQ ID NO: 1242:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 148 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1242:

ATCTTTACCT TTCACTGTTC ACTTATGTAC CATAATACTT CTGACAGTTA CTAATTAACA 120  
GCAACTCTAA CTCATTTATA TTAACTA 148

5

(2) INFORMATION FOR SEQ ID NO: 1243:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 588 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1243:

GGTACCAATC GATCGTTACA AACGTTTCGT TAAAGACGAT AAAAAAGTAC CAACAGGCAA 60  
TGAATATCGT GAATTAGTAT TAAAAGCAAT TCACATGATT ATGCTTG GTT TCTTGTATAA 120  
ATATATTGTT GCTTACTTTA TTAACACATA TGCAATCATG CCGTTACAAT TAGACTTACA 180  
TGGCTTTGTC AATTTGTGGT TATATATGTA CGCATACAGC TTATATTTAT TCTTTGACTT 240  
TGCAGGTTAT AGTTTATTTG CGATAGCATT TAGTTATTTA TTCGGTATTA AAACACCACC 300  
AACTTCGAT AAACCTTTCA AAGCGAAAAA TATTAAGAT TTCTGGAATA GATGGCATAT 360  
GACATTATCA TTCTGGTTCA GAGATTGTAT TTACATGAGA TCTTTATTCT ACATGTCTCG 420  
TAAAAAATTA TTGAAGAGTC AATTGCAAT GTCCAACGTG GCATTCTTAA TCAACTTCTT 480  
CATAATGGGG ATTTGGGCAT GGGAACGAAG TGTAATACCA TTGGTTTAAAG GGGTTAAACC 540  
ATGGCCAGCC TTGGTTAAAG GGTanGGnCC AATAAGGACG GTGGGCGG 588

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(2) INFORMATION FOR SEQ ID NO: 1244:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 376 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1244:

ATTGCTGGAG AAAGGCAAGG CTTTGCAGGC GGATTGAACT CGACATTCAC TAGTATGGGT 60  
AATTTCATAG GTCCTTTAAT CGCAGGTGCG TTATTTGATG TACACATTGA AGCACCAATT 120  
TATATGGCTA TAGGTGTTTC ATTAGCAGGT GTTGTTATTG TTTAATTGA AAAGCAACAT 180  
AGAGCAAAAT TGAAAGAACA AAATATGTAG CATAAGTATT TTGGTGTATA TTGATATAAA 240  
GTAAAGCGTA ATATTATGAA TGATTAGCAT CGTTTTTCTT ATGAATTTTA TTAAGAAAAT 300

55

GTTATATGTh ACAAAA

376

(2) INFORMATION FOR SEQ ID NO: 1245:

5

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 288 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1245:

15 CAATTTGTTT TAAAGCAAAT TCTTTACATT TCTCACGGAA TTCAGCTGTT GACATTTTCT 60  
 TTCGGTCAAC ACCTTTTTTTC GTTAATGGCT TGTTC AATTG GGTAAACCAT GTGGTTATCC 120  
 CCCAACCTGG GTACCGTATG GGGTGGCCAT TAGGAAACCC CTTGGCAATA GGTTTTTTAA 180  
 20 TAAACCGGTA nCAAATTAAA AGGTCCTTTT TTAAAAAATT TTTGGTTTCC AAAGGGGCCA 240  
 ATGGnTCCCC CAATTAATGG TTAAAGGTTT TAACCCCAAT TTTCCGGC 288

(2) INFORMATION FOR SEQ ID NO: 1246:

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- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 161 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1246:

35 CATCATCAAT AGAACGGTAT TCGCAACGTC GTAGAAATCC CTTAAACGAC GAGAACAAAG 60  
 CAAGTCGACA TCAGTAAAC ATTAAAGATA TTATGGCTGA AGCAGAGAAC TTAATAACTT 120  
 TTTATAAATC TATACnTCC AAAATGTAAA ACTACCAAAA T 161

40

(2) INFORMATION FOR SEQ ID NO: 1247:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 421 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1247:

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TCACTACGTT GTTTAATTGT GGTAATTGCA GTTTTACAGG CTTGTCTAGT GAAGATTTAA 60  
 AACTTAATTC AAGTGTTTTA GTCATGAATA TGTCTCTCTG ATTAAATTGA TAAAGATTG 120

55

TTAATTTGGT CGTTTGATGC ATCAGGGTTA ATGTTAGCGA ATCGACGCTT AAATTCTGTT 240  
 TGTTTGCCGT TAGCGTctAC TTTAGTAAAT GaTAATACAA TAGTGATGTG GTTTATTTtA 300  
 5 CTCATATTTT AAAACCTCCT TTCACACTAT ATATCGAAAC AAAATAATAA AATGGCTAAT 360  
 TTTATTTTCT ATGTTTAAAA TCTATAAAAn AGGCAATAGA TATGTGTAAC TAAAATATAn 420  
 10 G 421

(2) INFORMATION FOR SEQ ID NO: 1248:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 409 base pairs  
 15 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1248:

ATAAGCTGCT GTTGATAATC CAAGTGCTAA AGTTAAATAT AATATAGTGC CAAAAATTTT 60  
 ATTCTTCTAT AAAAACACCT CTTCATATTT AATCCATATC TCTTTTTCGT TATTTATACA 120  
 25 GAATTTTCTG AAAATAGTCA AGGTTAATTT ATTTGCTGCA AATTTCAACC ACTTTATGTT 180  
 AAATGGACAT CAAAGTATAA TTGTATTATT ATTAAATTGT GCAGTGTATA AATAGACGAT 240  
 30 ATGCAGGAAC ATGTCGCCTA TTGAGCCCGT TAAAAAGACG GTGACTAAAT GAGATTTTCT 300  
 TTAACCATCA TTCGTTGTCA AAGTTTGGAA ATgATGGTTG TTTTTTATTG TTAAATTAA 360  
 TCATTGCGAC TTCTATATCA ATGAAAGTTA TCTTAATATA TGAAC TTCA 409

(2) INFORMATION FOR SEQ ID NO: 1249:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 217 base pairs  
 (B) TYPE: nucleic acid  
 40 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1249:

CTTTCAATTA CGAACAAATC ATTACTAGTT TATTTAATGA TAATGACTGn AATTTAGCAA 60  
 AAAACGTAAC ATGATCATTT AGCTTGAATT GGTAAACTG TTTATCCAAC ATTTCCAGAC 120  
 50 CAAATCACAC CGGTAAAACG TCAAAATATA TTGTnTCTAT GCCCGTTTTT ACCAGTTATC 180  
 TCATTGCAGG TATATTGATG AATTCACAAG TTGGTAT 217

(2) INFORMATION FOR SEQ ID NO: 1250:

(A) LENGTH: 176 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1250:

10 CAGAACGTGC GGATCGTTTT TATGCAACCT AAACCAGGTA CGGATTTAGC GTGGTTAAGT 60  
 GGCAGTGCAC TAAGTATATT CATTGATCCT GCATTACAC GATGAAAGCA TTTATTGCAT 120  
 GAGTGGGTAG ATGCATTTTG CTGGAATGAT TCACAAATGC ATTAGAGnAC ATTTAC 176

15

(2) INFORMATION FOR SEQ ID NO: 1251:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 212 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1251:

25

TTTCAACTTT CTAAATTATA ATATATCTTT TTAAAATAAG CTAGAATTTC TATATAATAA 60  
 ATGTTAATAA CGAAAAGGGA TGATGCATAG TGATCGCAAG CACGCCAGAG GCCGATTGTA 120  
 30 TATTGCGAGT TAGTTTATAT GGTTTGGGAT GATATGGATA GAATTGGTAA ACATCTCCTA 180  
 AAGCATGGTA TAGTGCAATT nAAAAnCTGT GT 212

(2) INFORMATION FOR SEQ ID NO: 1252:

35

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 131 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1252:

45 CAGTAAGTCA ATTGAAATGG CTAATTTATT AAATCTATAA AAGCATAGAG CACTGTTGTG 60  
 AGTTCATAAT CAAAGATTTA TAAATGThTC AGACTGCCAA TATAACATTT AGGACCTAGA 120  
 ACATTGATTA T 131

50

(2) INFORMATION FOR SEQ ID NO: 1253:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 462 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

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## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1253:

5 TTAGTAGTCA TCGGTATTGG TGGTTCTTAC TTAGGTGCAC GTGCAGCAAT CGAmATGTTA 60  
 ACGTCATCAT TTAGAAACAG cAATGAATAC CCTGAmATTG TATTTGTTGG TAATCACTTA 120  
 TCATCAACAT ATACGAAAGA GTTAGTTGAT TATTAGCAG ACAAAGATTT CTCTGTAAAC 180  
 10 GTTATTTCTA AATCTGGTAC AACTACAGAA CCAGCAGTTG CATTTAGATT GTTCAAACAA 240  
 TTAGTTGAAG AAAGATACGG TAAAGAAGAA GCACAAAAAC GTATATTGTC AACAAACGGAT 300  
 AAAGAAAAAG GngCTTTAAA ACAGTTGGCT ACAACGAAG GTTATGAAAC GTTTATCGTA 360  
 15 CCTGATGATG TAGGTGGAAG ATATTCTGTT TTAACAGCAG TAGGATTATT ACCAATTGCA 420  
 ACAGCTGGAA TTAACATCGA AGCTATGATG ATTGGTGCTG CA 462

## (2) INFORMATION FOR SEQ ID NO: 1254:

20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1254:

30 ACTCATAAGT GAATGGTTGA TTACCACTAG TTAAACTTC ATATACTATA GTTCTTTTTT 60  
 TTATTTTGCA ATTAGTTATT TTCATTATAA ACTTCCTTTC AAACACTGCT GAAATAGACG 120  
 TCTTTTCAA ATAAGCATGA TTAATACTTC AATTCTTTAA TCCACATATA TTTAAAAGTG 180  
 35 AGGTAGTAGG TAATAAATAT AAGACTTAAA GTTAAGATTG CTTTTTTCAT GTTTCATAAT 240  
 TAAAACCTCT GTAATTTTAA GGTTAGTATT ATGAAATAAT GGATTGGTTT ATTCTTTAGT 300  
 ACTAACTTCG TAGTAAATTA TATAGTTCGC TAAATTGTAT TTATCTACTA TATTTTGGGA 360  
 40 ATAAACAATT TCCTTTTCTT TCTTCAGTAA ATTATAAAAA 400

## (2) INFORMATION FOR SEQ ID NO: 1255:

45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 137 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1255:

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nAATCTATGT ATGGGGGCAT CCAAAGATTT CATAGACTAC TTATTGTGTTG ATGAAGCCGG 120  
 ACAAGCAATC CTCAAGC 137  
 5 (2) INFORMATION FOR SEQ ID NO: 1256:  
 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 139 base pairs  
 (B) TYPE: nucleic acid  
 10 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1256:  
 15 TGAAATGTAG AAATTGAATT AGAAATGAAG ATTAAAAATC nACACGTATC GTTCAAGTGG 60  
 TGCAGGTGGT CAGCCGTAAA CACAACGTAC TCTGCGTACG TATTACCATT TCCACTGGTG 120  
 20 TCATTGCAAC ATCTTCTGA 139  
 (2) INFORMATION FOR SEQ ID NO: 1257:  
 (i) SEQUENCE CHARACTERISTICS:  
 25 (A) LENGTH: 177 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1257:  
 TTACCA~~n~~TTA TTTTAACACC ATGTTTAGAC CAATTTGATC TGA~~C~~TAAATT AATCGCTGTT 60  
 35 TGTACCTCCA AATTGTTACA ACGTACACCT TTAGTTTTTC TAAATTAATG TATATTCATC 120  
 ACATCTTCTT CAGTTAAGGG TCAAAGTATA ATTTGTCGAA ATTGTGAAGT CGTTGTA 177  
 (2) INFORMATION FOR SEQ ID NO: 1258:  
 40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 250 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1258:  
 50 AAGACCAACC GAAATGAATA TCGACATGGA TTAAGCCTAT ATTCAGATGT AAACGGCGAT 60  
 TATATTAAAA AGCCAATTAC AGAATGTAGT GGTTAATGAA ATATGCCCAA GAATGGGCTG 120  
 TATCACTTAG GTGTATCAAA CTGACCAAAA ATTGGAAGGA CTTTAGGCCA AAAACCATGC 180  
 55

TTAATTTTTC

250

(2) INFORMATION FOR SEQ ID NO: 1259:

5

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 170 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1259:

15 ACATTTACGG GACATTTTCAT TACATCACCC TGCTTTATTT TGGATTATGG CCTAATTTAT 60

ACTGATAAAT CTAGGAGGTG GAAAAAAGAA TGCCCTGCAA TTTAATTnCA TTAAACCAAA 120

TAATGAAACA ATAAAAACA TTATATCGTT ACTTATTAAG TAATTGGCA 170

20

(2) INFORMATION FOR SEQ ID NO: 1260:

25

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 313 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1260:

TTTGTACTCC GATACGTTGT ATTCAGGTG ATGACACTAG GAATTTGTAA TGATCAATTT 60

CTCTAATTCT TTACAATTGA TAGAATTCTT CGATTTGTGG ATAGACATTC ATATCATTGT 120

35

CTAATGATTT TTGGTGATTC ATAAATTGTG ACTAAAGCTT GGATGCTTTA GGATTGTAGC 180

TGAGACACAT GTTGCGTGAC TGnGGATTTA TCAATAATC TCAATCACGT GATCCnATCA 240

CATTCATCAG CTCACTAAAT CAAGATGATC GTCGTTTATG GGCGATTAAT GGCGTACCGC 300

40

CAGTGTCCGC ACG 313

(2) INFORMATION FOR SEQ ID NO: 1261:

45

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 206 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1261:

TAGCGATCAT TTAATCAAGG TTAGATTATT TAATGTCAGC ATTACGTTTG ACAATGAACT 60

55

GTTTGAGGTT ATCACAATGC CATTTAACAC TATGCGCACA TGGCTGAACT AATnAGCGAC 180  
 GAGATGACTT CAAACCTTGA TTAGGT 206

(2) INFORMATION FOR SEQ ID NO: 1262:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 144 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1262:

AAGTGTGTAC ACGATAGCTA AACTCAAATA TCACAGAACA ACAAATGTCT TAGTACTTTG 60  
 TGCCGGTGGT GGTACAAGTG GATTATTAGC CAATGCACTA ATAAAGCAGC TGAAGAATAT 120  
 CATnTGCCAG TGAAAGCGGC ACTG 144

(2) INFORMATION FOR SEQ ID NO: 1263:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 132 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1263:

ATAACGACAC CTAATGCAAT TTGAATAAAG CAGTAGAATT TGTGGGAATC GATTATTGAT 60  
 AACCGAACTA ATAATCACAG CAAAAATAAA ATTAAAAATG CTCTAATAGT GCCTACATnC 120  
 TCCTCAAATT TT 132

(2) INFORMATION FOR SEQ ID NO: 1264:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 159 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1264:

TATGTCAATT TCGTAGAATl GGTTTTAnGC GCTATITAGA ATAGCCATCA GATAAAATCA 60  
 TTATTTAAAC GTATAATAGG TCAAAATATA GAGAGTTACT ATACAAATTT CTAACTTTCA 120  
 CTTAAATAA AATATATATA ATTAAAGTGG AGGAGAAGG 159

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 132 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1265:

|                                                                   |     |
|-------------------------------------------------------------------|-----|
| ATAGCTCAAG CAATCATTAT GTTTATAATG ATTGTATGGT TCTTTATAGA TGCTTTATTG | 60  |
| ATTAATTAAT AAAAAGCTTA TTGCAAAATA TGTTTTTCGG TAACTGTAAT TTAGTGATT  | 120 |
| TATCATTAAC AG                                                     | 132 |

(2) INFORMATION FOR SEQ ID NO: 1266:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 405 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1266:

|                                                                    |     |
|--------------------------------------------------------------------|-----|
| CATGGATTTA TCTTAGCGAT TGGTCTAATT TTACCTTTAG GTGCACAAAA TGTATTTATT  | 60  |
| TTTAACCAAG GAGCTAATCA ACCAAAATAT AGATATGTAT TGCCTGCAAT AATTACAGCC  | 120 |
| GGGTTGTCTAG ACAGCTTACT TATTATTATT GCAGTGGTAG GAGTWTCTAT CATTATTATG | 180 |
| TCTTTACCTG TACTTCAwGC AwTTATTTAT ATAGTTGGTT TAATTTTCTT GATGTATATG  | 240 |
| GCTTGGACCA TTTGGCATGA TAAACCCTCA ACAGATGGAG AAACCTCAAAT TATGTCTCCA | 300 |
| ATGAAACAAG TAAGTTTTGC TTTATCAGTT tCATTACTCA ATCCACATGC TATTTtAGAT  | 360 |
| ACAATTGGAr TAATTGGtAG TAGTGCTGCA TTATATAGTG GChGC                  | 405 |

(2) INFORMATION FOR SEQ ID NO: 1267:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 125 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1267:

|                                                                    |     |
|--------------------------------------------------------------------|-----|
| TCTTTATATT GCAGTACAAA ATTCGCGTGG AGGTTTAAACA CAAGTAGACC GCACAAGATT | 60  |
| TAGCGTCTGA AGGTATTACT GTGTAATGCA TTCGCACCTG GnTATCGTTC AAACACCAAT  | 120 |

## (2) INFORMATION FOR SEQ ID NO: 1268:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1268:

TTTGCCCAAG TGACGTAAAG TACCCAATGT CCATTTGTAC TTGTATCGCC ATCAACAGTA 60  
 ATCATATTAA ATGTATGGTC AGTCGAAGAT TTTAATAATT GATGAAGTGT ATTCGATTCA 120  
 ATCGATGCAT CGTGTATATAA AAGCAAGCAT GTAGCCAATT GGAATCAAC CCGAnCTTGG 180  
 CACACATGTA CGTTACACAT TAGAACnCAA GTGACCGACG GTAATCCTAC CCGCTCAACA 240  
 CAAGCGC 247

## (2) INFORMATION FOR SEQ ID NO: 1269:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 215 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1269:

TCATTGTATA TGAGCAGATT GGCTAGGCGG TGGCTGGACT GACGGAATCG ACACCCGGCT 60  
 GGGGTTGGGA AAAGTACAAG ACGCAACATG CTATGATTTT CCTATGTGGT TATCGTCCGA 120  
 TTAAAGTGA GCAGCGCACG GTCAGTCATC TCTCACAGnA CCTAAAAAGA ACAGTAAGCn 180  
 CAACCTAAAG CAGTGGAAGT TAAATCATC AAGGT 215

## (2) INFORMATION FOR SEQ ID NO: 1270:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1270:

ACAATAAAGA CTATTAAAAG AGATATAGGT TAGATATTAC ACTTTTAGAG CAAGACGGTA 60  
 TAAATGCAAG TAAATTCGTG TATTTATCAA TACAGCAGGT nGAGTGAAAG GCCCAGCAG 119

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 223 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1271:

CGTGGCACGT TAAGCGTTTA ACCATAGCAT TAAGATGATT GTCTAGCAGA GGCGATTTGC 60  
 GGGCTCACTA CAGTGCATGA TGAACCTAAT GCTTCAAATG TAACATTAAA AATAAAAGCA 120  
 ACGATGTCAC TTCTTACTTC TACATCTGCC ATnTTCGTGA TTTCGTATCT ATCCCGCATC 180  
 TCATCTTGAA CGTACGAGCC TAATCGCCn GCGCGATCCT GCC 223

(2) INFORMATION FOR SEQ ID NO: 1272:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 120 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1272:

TAGTTACAAT ATCTGTCAAT TTCTGGAGAA CCACTAAAGC TATGCATAAT CCCGCCTACC 60  
 TCTTCAGCAT GCTCTCCAA TAAGATATCG GTACAGTCTT GAGnTGCTTC ACGGTTATGA 120

(2) INFORMATION FOR SEQ ID NO: 1273:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 126 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1273:

TTGCGCGGCA GTAAAATTCA AACTATTGGC GTCATTTTGC CTAGCTTAAC AAATCCGnTT 60  
 TTCTCAGCAC TGATGCAAAG TATTCATGAC CATAAACCAT CTGATGTTGA TTTATGCTGG 120  
 TTAACA 126

(2) INFORMATION FOR SEQ ID NO: 1274:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 131 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1274:

GATTCTGAAG GATCAATACn ACATGTACAA TTTTGGCGTA GGTGCAAAGG CATCAGGTTT 60  
 5 GCTTGCTAAT CTACATCGAA GCGGCTACCT AAATTAAATGA GAAATCACAC TCAGTTAATG 120  
 CATGTACTAG C 131

(2) INFORMATION FOR SEQ ID NO: 1275:

10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 159 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1275:

20 TGGAGTATTA CCTCAAGTGA ATACAACATA CCTGTTGGAA GATTTTTCAA AACTTTAATT 60  
 GGACCAAGTG ATGCCATTGA TGAGTTAAAT CCTAATAGAT TCAGGTTACC TCGGATGATT 120  
 GATACTAATT TGGCCTGGCG CACGCTTTAG TAnTAGTGG 159

25 (2) INFORMATION FOR SEQ ID NO: 1276:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 577 base pairs  
 (B) TYPE: nucleic acid  
 30 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1276:

GAAGTAAATA ATATATAGAA TATAACAGGA AATAAAATAG ATAATATTAA TGTTGTTTTT 60  
 TTACGCATTA TAACTTTAAA TTCGATTTTC AAGTAACTTA GTATCATAAT TAGATCCCCT 120  
 40 TTGCTTTTTA TTGnTGAAGT ATGAATCAAC AATTGAGACT tTTTGATTT CAATATCATC 180  
 CAAATTAATA TGAAGTTGTT GAAGATATAA AATCGTATCA TTTACATTG AAGTAATAAT 240  
 TTTsATAGTG CCATTATGAT TTTyycTGAA TAACTAAATC ATCTTTATCT AGTTTTAACT 300  
 45 TTCTTATATA TTCATCGGAT AACGTAATCT GAGATTGCTG ATTGGTTCTA ATATGTGACG 360  
 TTGAATCATT AAGTATTATT TCTCCATTTT CAATGAGAAT AATTTTGTCT GACATACGTT 420  
 CGACTTCTTC AATATAGTGC GATGTATAGA GTATCGTTCG ATTATCTTCT TTTAAATTTT 480  
 50 CAATAATTGA CAAAAAATAT TCTCTAATTT CTATATCCAT AGTCGATGTT GGTTCATCTA 540

55

## (2) INFORMATION FOR SEQ ID NO: 1277:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 131 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1277:

CTAAAnTAAG GTAATAGTTA CCAAGTACCA TATCTTGTGG ATGGTGTACT ACAGGTTTAC 60  
 CATCTTTAGG TTCAAGATGT TTTGATGACT GCTAACATCA ACATTCTTGC TTCAGCTTGT 120  
 GCCTCTTTTG A 131

## (2) INFORMATION FOR SEQ ID NO: 1278:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1278:

GTTTGCAGATA TTTTAGGCAG ACAACCTAAC TTTACAGAAA CAGGTATCTT TTCTGTTATG 60  
 TGGAGTGAAC ATTGCTCTTA TAAACATTCT AAACCGTTTT TAAAGAATTT CCTACGCAGG 120  
 TGCCATGGTT TGGGCTGGAG TCAGGTGCGT TGTGTATAGC TGATnA 166

## (2) INFORMATION FOR SEQ ID NO: 1279:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1279:

CATAATTATG AAAATGATAT GATTTTTATT AGACCATTTA AAAAAGCATA ATTTAAATCG 60  
 AAGGCAGGAC ATTGAAATAT GAAATTTTCA ACTTTAAGTG AAGAAGAATT TACCAACTAC 120  
 ACCAAAAAGC ACTTCAAACA TTATACGCAG TCTATAGAAT TATATAATTA TAGAAATAAA 180  
 ATAAATCATG AAGCACATAT TGTGGGAGTG AAGAATGATA AAAATGAAGT TATAGCTGCA 240  
 TGTTTATTAA CAGAGGCACG AATTTTTTAA TTCTACAAAT ATTTCTACTC TCATAGAGGT 300



ATTCATTTAT AAAAATAGAG GAGTATTTAT TCTGTGTGAT CCATATnTAA TAGAGAAT

418

(2) INFORMATION FOR SEQ ID NO: 1280:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 449 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1280:

|                                                                   |     |
|-------------------------------------------------------------------|-----|
| GACATATCAT AAATTACATG GTGATAAAAT TnTCGGCTAC GATACTAACG GATTCCCGAT | 60  |
| TACCTGGTTT TATCCATTAG GTGAAAAGAA AGTTGAACGT AAGGCACCAA AATTAGAAAA | 120 |
| ATAATTAAAT AAAACAGCTT AATGATGTAA TGAAATTAGT GAGTTAATCA CTGACTTCTA | 180 |
| CGTCATTGAG CTGTTTTTTT GTGCTTTGTT ACAAAGCATT ATTGAATTTA TTTTACGTGT | 240 |
| TCATATTTTG AAACATCAAA GCCGTCTTGT TTAGCTTTGT TGATAATGTC TTTGATTGAA | 300 |
| TGTAGTCCTT TATCGGCGAA GTATGATCTT AAGTTGTCTT TTGTAGCTTG GTCAGCATTC | 360 |
| TTATCTAATA ACACATCAAT ATAECTTAAT TCATGTTCTA AGAAGTTTGC ATCATCATGT | 420 |
| AGTACGAGTC CATTTTGAGA ATAACTTT                                    | 449 |

(2) INFORMATION FOR SEQ ID NO: 1281:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 289 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1281:

|                                                                   |     |
|-------------------------------------------------------------------|-----|
| TATTTATATG TACTGATGAT GAAGTTTATT ATCTATCAAG TGGATCAAAT CCGAAATATA | 60  |
| ATCAGTATAT GGGTGCATAT CATCTACAAT GGCATATGAT AAAATATGCA AAATCACATA | 120 |
| ATATTAATAG GTATAATTTT TATGGAATAA CAGGCGTCTT TAGTAATGAG GCGGATGATT | 180 |
| TTGGTGTTC ACAAATTTAA AAGGGTTTTA ATGCACATGT TGAAGAATTA ATTGGTGATT  | 240 |
| TCATCCAACC AGTAAAACCC ATTCCAATAT TAATnTGCCA AACCTnAAT             | 289 |

(2) INFORMATION FOR SEQ ID NO: 1282:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 402 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1282:

5 ATTCAGGTCG AGGTGGCCCG GCTCCATGCA CCGCGACGCA ACGGGGGAGG CAGACAAGGT 60  
 ATAGGGCGGC GCCTACAATC CATGCCAACC CGTTCCATGT GCTCGCCGAG GCGGCATAAA 120  
 TCGCCGTGAC GATCAGCGGT CCAATGATCG AAGTTAGGCT GGTAAGAGCC GCGAGCGATC 180  
 10 CTTGAAGCTG TCCCTGATGG TCGTCATCTA CCTGCCTGGA CAGCATGGCC TGCAACGCGG 240  
 GCATCCCGAT GCCGCCGGA GCGAGAAGAA CTAATTGATA CAACACTTTC TCAACCTGAT 300  
 CTTCTTTACC TTCTACATAG CGCGTGAgCA GAACcATCTT GATGgCACAG CTAAATAATG 360  
 15 CaATgGGAAT GATGTATGAC ATTCGGGGTG CATAATTTCT CT 402

(2) INFORMATION FOR SEQ ID NO: 1283:

(i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 224 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1283:

TATTGACAAC CAGAGTACAA ACAGCAGCTA TATTATAGAC TTAGGTCTGA AGTGGTAGTG 60  
 GCGGTGGACT ATTGTTGCGA CTGGACACCC GAGATATTGC TCAGCAnAGC ATCATATACA 120  
 30 GGAAGTATTA AAAGAGACTT GncGAGTAAC AAATACTGAA GTAATAAGAT TAAAAGAGTG 180  
 AGGTGTATAA TTATCCTCGT TCTTTTATAT TAGTATGATA GAGA 224

35 (2) INFORMATION FOR SEQ ID NO: 1284:

(i) SEQUENCE CHARACTERISTICS:

40 (A) LENGTH: 146 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1284:

45 CGTGGGAGAT TGTGCATATT GATTATGCAA GGAAGnACGC CATAAAAGTG GATGGCCAGA 60  
 CATCATTAAT ATTATTGATA CCACATCAGA AGGTATTCAA AGTGAATCGG TGATAAGtGA 120  
 ATCAATTAAG TCTGCCAAAG AAAAGA 146

50 (2) INFORMATION FOR SEQ ID NO: 1285:

55

(A) LENGTH: 137 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1285:

10 ATTTGCGGTG ACTGGACTTG GATCCGCAAC TTGGTAATTT AAGGAATTCT TGTCATTATA 60  
 AGCCCTCCAT TTCATGATTT GATTTGCCAC TCGGTAACCA TTGGGGTTAC AGCTTCACTA 120  
 GGGGAnATAC GAACCTC 137

15 (2) INFORMATION FOR SEQ ID NO: 1286:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 594 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1286:

25 GCTATTGATT ATGGTTAGCm TGTGTTCwC TTTACTCATT GTTCCTTGGt TAAGCTCrAA 60  
 AAAAGCACGT ACTTTAAAGA AACATGCAGC TAATGAACAG GCCCGATTTT TAAATCATTT 120  
 30 TTATGATTAT AAAGCTGGTA TGGATGAACT ACGTCGATTT AATCAAATTA ATCATTATCG 180  
 AGATAATTTG ATGGGTAAAT TAAATCATTT TGATAAATTA CAACTTAAAG AGCAACGCTT 240  
 TTTAACGATT TATGATTTTA TATTAAATAT TATTGCTATG CTTTCGATTT TTGGTAGTTT 300  
 35 AGTTCTAGGA TTAATTCAAA TTAATGCAGG CCAACTAAAT ATTATTTATA TGACGAGTAT 360  
 AGTTTAAATG GTCTTAACTT TATTTGAACA AGCTGTACCA ATGACAAATG TCGCGTATTA 420  
 TAAAGCGGAT ACTGACCAAG CATTGCACGA TATTAATGAA GTGATATCTG TACCTTCTAC 480  
 40 TAATGGAAAA AAACGTCTTA ATGATAAGTA TGATGCAACG AACATTTATG AAGTTAAGGA 540  
 TGCTAGTTTT AAGTATTGGA ATCAGCAAAC GTATGTnTTG TCGGATATTh ATTT 594

45 (2) INFORMATION FOR SEQ ID NO: 1287:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 233 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1287:

55

TGAAGTAGTA ATAAACCCGG AACCTAAAA CTGGATGGAG GATGAAACCA AAAAGGAACC 120  
 5 AGCCAAGCCA AATTGGGGAA ACCAGGACGG CCCAATGGAG GTCCAACCAA TCCAAACCCC 180  
 ATTCGCTAA TgNtATGGG TCCAATTAG GAATCCAATG GATGGATGGA TTh 233

(2) INFORMATION FOR SEQ ID NO: 1288:

10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 132 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1288:

AATCCCTGTA CGTTCGTAAA GCTAGCTGGn TAATAAAAAA GAGTCTGGAA AGTAGGCAAC 60  
 20 AATCAATGAC AATGAGCAGA TCCAATCGCA GTATGCTTAC TCGTGTAAGA AACGCAAACA 120  
 TGGTGCGTCA CG 132

25 (2) INFORMATION FOR SEQ ID NO: 1289:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 154 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1289:

35 TATCTGATAA TTCTGTACCC AGGCGTTTTA ATATGTTTAT CTGGTGTCAAT GATACATAAA 60  
 CATTGTACCT TTAGGTCATA CGATGTCGCA AATAACTGCT CTGCGCTTA CAACACCATT 120  
 ACGGTTATAC ACTThTAGCC AATCATTATC TGGG 154

40 (2) INFORMATION FOR SEQ ID NO: 1290:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 145 base pairs  
 (B) TYPE: nucleic acid  
 45 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1290:

AAAAGTGGCA CATGCGGCTG TAAAGTCCTC TGTTTCTGAT AAATCATAAC CTATATACAT 60  
 GTCTACCTTC CAACTCATCT AAGAAATAAG TCATATTTTT TTGAATGTTG GATAATCAAT 120

55

## (2) INFORMATION FOR SEQ ID NO: 1291:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1291:

CTTAATGCTA TATATTCTTT GTTTTGTGATA CCATTTTCATC GTCTTCTCTT GATTTCCTAAA 60  
 CAATTTAGAA AATAAAAGAA TATACGCTTC AGACTTATTA AAACCCGCTA TATCATCTTG 120  
 ATATTGTATT AACAAATTGAG TAAAGCTGTG TATTAAGTCA TCTTTCTTCG ATGCAATGGT 180  
 AGTTAATGAT TTTACACGAT AAGCATATTT ATCTGTAAAT AACTTAGCAA CTACCCCACC 240  
 TAAATCATGT CCTAGAATAT GTGCCTCATG AATATTTAAC TTCTCCATTA GAATTTTAA 300  
 ATCCTCAACG TGATCGTTTA AATCGTATGA TTCACTTTTA GAAGACTTGC CATGACCTCT 360

## (2) INFORMATION FOR SEQ ID NO: 1292:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 164 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1292:

TGTGTTAGTT GTTTATGTTG TTGATATATA CTGCTCGTGC ACATGGTACC CAGACGATTC 60  
 AACGnTGAGT ACACAAAATA CAAAATCTAC GGCACATGGT ACCGTTTATA AAAGATGTGG 120  
 AACCTTACTA GCATTTGTTG AGAACGCTAC ACGTTTAAAT CAAG 164

## (2) INFORMATION FOR SEQ ID NO: 1293:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 132 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1293:

TTAATTTTCT ATATATTTCT TAGGTTATAT TGGTATCTAT GCCAGTAAGT GACATGACGT 60  
 TAGATCATTG AATCCAAGAT CGAnACATTG GGACATATTT ATTAACGACA TGGCTTCAAC 120

## (2) INFORMATION FOR SEQ ID NO: 1294:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 213 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1294:

GTCATGChTA ACAGGTGAAT ACCTAGTAAT TCAGATATTA TCATTTATAT ACCCTCTTAT 60  
 ATTTTAGTGC ATTATCTCGA AATCGAGATA CTTAATGTAA ATTTTATAGT CAGCCTACAC 120  
 TTCGTGATTG GGCAnTAGTT CTTAAACGCT GTGGTAAGAT GTTAATTCAT CCTTGGTTAA 180  
 CACACAAACG CTTGGTTAAT GCTCAGCAGC TAG 213

## (2) INFORMATION FOR SEQ ID NO: 1295:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1295:

AAGAAGTTTG AAGTCTATGA AAACAATCAA AAATGCCAG TGAGACTTGT ATCATATAGT 60  
 CCTGTACCAG AAGACCATGC CTATATTCGA TTCCAGTTT CAGATGGCAC ACAGATGAAA 120  
 TGTTCCTCGn CCAATGAGAG GGAGAACATA GTATCAATAG ATG 163

## (2) INFORMATION FOR SEQ ID NO: 1296:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 207 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1296:

TAGCTTTAAT ACATTCTGAT TTTTAAACGC TTCGAAATGT TTTCAGTAAC TAATTTTGCC 60  
 ATAATCCCAA AAACCTCTTG ATTATTAAC GChTTTTGAT TGGCTACATT AAGGCTTTAT 120  
 ACACATCAGC TCACCATGCC CATATCTACT AATGGTTATA TCCCTAGAGT CCCAGCGATA 180  
 TAACATCAAC GCTTACnGGA GTTTCAG 207

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 145 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1297:

|                                                                   |     |
|-------------------------------------------------------------------|-----|
| ATGGCATCGG TTGGTTATGA AAAGnCAAGC CATGGGGAGG CCATATTTGG GGTGGAATCA | 60  |
| TACCTGGAAC CTTTGGTGCC TACCACCAAT TGGTAACGGT TTTACCATCG GATTTTtagT | 120 |
| GATACAGCGA TATGTTTTGT ACAGG                                       | 145 |

(2) INFORMATION FOR SEQ ID NO: 1298:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 139 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1298:

|                                                                   |     |
|-------------------------------------------------------------------|-----|
| TCCAAAAGTT AAAGGTCAAT TGAAACAGAn AAAGCTTATT ATGTCTGGAA AAGTATTAAA | 60  |
| AGTAATGGTA TCAAATGACA TTGAACGTAA TCATTTTGAT AAGGCATGTA ATGAAGTCTT | 120 |
| TCAAGCGTTG AATTGTGGT                                              | 139 |

(2) INFORMATION FOR SEQ ID NO: 1299:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1299:

|                                                                     |     |
|---------------------------------------------------------------------|-----|
| GATATTGGCA ACCTTCAGCC GATGACCTCA TGGCAAATGA TTGGGAAGTT ATAAACCCAA   | 60  |
| CTAGAGACCA GGAATTATTG AAGCAATTAT AGAAATGCTA TCAATGATAC TTTTAAATT    | 120 |
| GTTTTTAAAC TCATTTTCAA AGTAAACAAC AGTCTTGTCT GAAATTGTTA CATGATAAAT   | 180 |
| AGTGTTACTA GCATACACGC CGTTTAGGAA CCCAGAGTTT TTAAGTTTAT TTAAATCGTA   | 240 |
| TTTTACATCT TCGAAATGTA GTTTTGAATGTA ATACTTTGTA TGTATATCTT TAGCACTTCC | 300 |
| AAAATTTATT GGCAGGTTAA TTTAATCGAA CCTAACTTTA CACATTCTAA ATAATCTTTG   | 360 |

## (2) INFORMATION FOR SEQ ID NO: 1300:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 693 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1300:

```

CTACAGTGCA ATTTAACCAT GAAGTTGTG ATTTTGAACA ATTATCAAAT GGTCAATGGG      60
AAGTTACTGT TAAAAATCGC CTAAGTGGTG AGAAATTCAA ACAAGTAACT GACTACGTAT      120
TCATCGGTGC TGGCGGTGGA GCAATTCCAT TATTACAAAA AACAGGTATC CCTGAAAAGTA      180
AACATTTGGG TGGATTCCCT ATCAGTGGTC AATTCTTAGC TTGTACAAAC CCaCAAGTTA      240
TTGAACAACA CGATGCCAAA GTTTATGGTA AAGAGCCACC TGGTACACCA CCAATGACTG      300
TACCTCATTT AGATACGCGT TACATTGATG GTCAAAGAAC ATTATTATTT GGACCATTTG      360
CTAATGTTGG ACCTAAATTC TTGAAAAATG GTTCTAACTT AGATTTATTC AAGTCTGTTA      420
AAACATACAA CATTACAAC TATTAGCAG CAGCAGTnAA AAACCTACCT TTAATTAAAT      480
ACTCATTTGA CCAAGTAATT ATGACAAAAG AAGGTTGTAT GAACCACTTA CGTACTTTCT      540
ATCCAGAAGC ACGTAATGAA GATTGGCAAT TATACACTGC TGGTAAACGT GTACAAGTTA      600
TCAAAGATAC ACCTGAACAC GGTAAAGGAT TCATCCAATT CGGTACAGAA GTGGTTAACT      660
CACAAGACCA CACTGnAATT GCATTATTAG GTG                                     693

```

## (2) INFORMATION FOR SEQ ID NO: 1301:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1301:

```

CATACTTGGG TAATGCTGCC CATGnACGC TGGnACAAGG TAAAGTTGCA CGTTTAATTT      60
GTGnATGTAT ATAAACAGA TGGGAACACC ATTTGAAGGG GATCCTCGTG CAAACTTAAA      120
ACGTGTATTA AAAGAAATGG AAGATTTAGG cTTCACAGAC TTTAACCTAG GACCTGAACC      180
AGAATTCTTC TTGTTAAGT TGGATGAAAA AGGGGAACCA ACTTTAGAAC TTAATGATGA      240
TGGTGGATAT TTCGATTAG CACCTACAGA TTTAGGTGAA AACTGTCGTC GTGATATTGT      300

```



TCAACATGAA AtTGACTTaA ATATGCAGAT GCTGTTACAG CATGTGATAA TATCCAAACA 420  
 TTAAATTGG TTGTTAAAC AATCGCACGT AAACATAATT TACACGCAAC A 471

5 (2) INFORMATION FOR SEQ ID NO: 1302:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 10 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1302:

CATGTGATTA AGAACGTTCA CTGATGAATT TTTGATGATC GTTCGGTTTT TGTTCGGATT 60  
 TTAATGATTA TTTATACAAA AACAGCCGTA TTTCAAGCCG TACATTTTAA ATTAACTAA 120  
 20 ATTTGCATCT AGTTAATAAT TGCATTTATC AAATTTGTCT TATTGATCCA ATCTAATTTG 180  
 TACTCACAAA CTAGTTTAA ATTCTAAGTT TATCTCTCAG TTCGTTATCA ATCATCAGAC 240  
 ATAAACCAAT GAAGCAATCA GAAACACTC TAATTTTCTa TTAGAAATTT GtTTTAATAT 300  
 25 AAAAAACAG GCTTACTTCA TATAATTTAT GAAATAAACC CGTCAATTTT TGTTTAATAT 360  
 GCTTGGTGAT CTnTTATTCT GCGTAATAAT GCTAAACCTG 400

30 (2) INFORMATION FOR SEQ ID NO: 1303:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 128 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1303:

40 AAAAGCTTAG TTGAACCTTC AACGTATCTT AGCTACTGAA GGTGCAGAAG TTTTAGAAGC 60  
 AAAAGACTGG GGTAAACTnC GCCTAGCTTA TGAAATCAAT GGATTTCAAA GATGGGCTCT 120  
 ACAACATC 128

45 (2) INFORMATION FOR SEQ ID NO: 1304:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 141 base pairs  
 (B) TYPE: nucleic acid  
 50 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55

TCCTTCGGAT TCTAAATGGC ATTGGACAGT GTTTACAAGC TCGCATTTCT CCACTTTTTG 60  
 CAATTTCTTT TACAATTTCT AAAGCTTCAT CAAAGTTTCC TTCAATAGnA AACGATTTCT 120  
 5 GCACCATACA TTACTGACTT G 141

(2) INFORMATION FOR SEQ ID NO: 1305:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 162 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1305:

GACTGGTAAA CACTAAGTGA ATTAGCTGGA CAATGAAAAA TATCCACAAT CATTAATTAA 60  
 20 CGTACGCGTA ACAGATAATA TCGGTTGAAG AAATGTTGAC GTTAAGAGTT ATGACTAAnt 120  
 AGAGTAGAAT GATGGTGAGG TCGATTTTtag TAGACTCTGG AC 162

(2) INFORMATION FOR SEQ ID NO: 1306:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 282 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1306:

TTCTTAGTTG CTCGAACTAA TAATTTGCTT AATAATGATs TAGCTGTTAT TGTGTCATAT 60  
 TCTAAAGGTG CCATAAATTT AAAAActATA GTAGTTGTTT TAAATTTAGT TGTGGTGAA 120  
 ACTTTGATAT GTATATTTGG TTGAGATTGT CTAActAAAT ATATAGCCTC CTCTATATCT 180  
 40 TCTTACATCT ATATTTTTCT AGTGATTTTA AATTGAACTA AGCTATTTTT CATATAATTT 240  
 AATGAATACA AAATAGGTTT ATCTGATTCA TTATAGTGCG TA 282

(2) INFORMATION FOR SEQ ID NO: 1307:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 276 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1307:

55

AAGGAAAAA CCCTTGGCCT TTGAAAAAA CCCAAAAGGA AAGGGGTTTA AAAAAAAAAA 120  
 AAGTTTAACC CGGTTGGCCC CAATTCCC GC CCGGGGAACC CAAAAGGAnT TTTAAAAAAG 180  
 5 GAAACCCAAT TCCCGCCCG AAAAGGGTTT TTAAGCCCA CCGGATTTTA AGGAAAACCA 240  
 TTTTAAGATT ACCTGGGAAA AAAAACCGTT TAGGAA 276

(2) INFORMATION FOR SEQ ID NO: 1308:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 692 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1308:

20 TGTATTTAAT GCTCGTACAC ACAATTACAA AACTGCAAGA GAAAAAGCAT TGAGTAATAA 60  
 TCATATTCCA GAAATGTAT ATGACAATCT AGTAAAACT GTACATAAAT ATTTACCATT 120  
 GCTACATAGA TATACTGAAT TCGCAAAGA ATTGCTAGGT TTAGATGACT TGAAAATGTA 180  
 25 TGATTATAT ACACCATTAA TTAAAGATAT TAAGTTTGAA ATGCCTTATG AAGAAGCTAA 240  
 AGAGTGGATG TTTAAAGCAT TAGAACCAAT GGGTGAAGAA TATTTAAATG TAGTTAAAGA 300  
 AGGCTTAAC AATCGTTGGG TCGATGTCTA TGAGaATAAA GGTAAACGTT CAGGTGGCTA 360  
 30 TTCATCAGGT GCACATTTAA CTAATCCATT TATTCTACTT AACTGGTCTA ATACTATTTC 420  
 AGACTTATAC ACATTAGTTC ATGAATTTGG GcATTCaGCA CATAGTTAcT TCaGTAGAAa 480  
 ATTCCaACCg TCaAATTCTa GTGACTACaC TATTTTTGTC GcTGAAgTTG CaTCAACTTG 540  
 35 TAACGAAGCA CTTTAAAGTG ATTATATGGA TAAACATCTT GATGATGAAA AACGCTTATT 600  
 ATTATTAAAC CAAGAATTAG AnCGTTTCAG AGCTACATTA TTCCGACAAA CAATGTTGCGC 660  
 40 AGAATTTGAG CATAAnATTC ATGCAATTGA AG 692

(2) INFORMATION FOR SEQ ID NO: 1309:

- (i) SEQUENCE CHARACTERISTICS:  
 45 (A) LENGTH: 151 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1309:

GGACTATTCG ATGATAGCTT TTTTACTGG ATTTACTAAA ATGAAAGCAA GTACTATATA 60

atCGAGTAAT ATCTATATAT GACATTTTAA A

151

(2) INFORMATION FOR SEQ ID NO: 1310:

5

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1310:

15 TGTGCATTTG ATAATATTCA CTATGATTG TGGTCATTCA CATCGTCTAC GCTCACCGGT 60

CTAAACGTAC CTAACCCAAC ATGTAATGAA CAAATGCGAT ATTAnCACCT TTATT 115

(2) INFORMATION FOR SEQ ID NO: 1311:

20

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 164 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1311:

30 CACCCAACTG ACCTCAATGG TATAATGCAT TTGTGAATAC CGAATATCAT TGGAATATCT 60

CCTATCATAG GAATATAATA TGTATATATC TTCGTAATCn TGTTCATTTT TAAGAAAATC 120

AATAGAAGTG TATCGATTAA AACTACATTT GAACCATTAC TTTG 164

35 (2) INFORMATION FOR SEQ ID NO: 1312:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 141 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1312:

45

GAGGAAAATC GAAGTGAAAT TATTAAAATA TGGCGATGGT GGAATACGAA TAGATGGTGG 60

TTTAATAGGC GGCTTTATTC GGGTGTATT GTATGTAAAG TGAAAAATTT AAnCCCATTT 120

50 CAAATTGGTG ATATCGTTGC G 141

(2) INFORMATION FOR SEQ ID NO: 1313:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 133 base pairs

55

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1313:

AATTGGTATT ATGCATAGTG CAATGGATGC TGGTATTAAA nTCCAGAGGA TTACAATTAT 60  
TAGTTTCAAT AATCACGATT AGTTGAGATG GTTAGCCACA ACTTTCTAGT GTATCACCAT 120  
TATATGTATC GGT 133

(2) INFORMATION FOR SEQ ID NO: 1314:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 629 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1314:

TTGCAATTAG AATGCTGTTT CACCCCTTTA AACCATACTA TATATTTAAA TTTAGAGTCC 60  
CATTTACACC AGGTTTAATA CCGAAAAGAC GCGAAGAAAT TGCAACTAAA ATTGGCCAAG 120  
TGATTGAAGA GCATTGCTT ACAGAACTT TAATTAATGA AAAATTGAAA AGCGAGCAAT 180  
CACAGCAAGC AATAGAATCT ATGATTCAAC AGCAGTTACA AAAGTTGACG AAAGATCAAT 240  
TGTCATAAAA ACAAAATTACT TCTCAAATCG tATTGATTTA GAACAAGTAT TACaAACTAA 300  
TGGAAATCAA TATATTGAAT CACAATTgAA TAATTATTAT aCAAAGCaTC AAAACCAAAC 360  
AATAGCATCT TTATTGCCAA ATCAACTTGT AACATTTTTA AATCAGCATG TAGATAACGC 420  
AACAGACTTA TTATGTGATC GTGCAAGGAA TTATTTATCA TCTGCAAAAG GCACACAAGA 480  
TATTAATGAT ATGTTGGATA CTTTTTCAA TGAGAAAGGT AAGTTAATTG GTATGTTGCA 540  
AATGTTTATG ACAAAGAGA GTATTGCAGA TCGCATTCAA CAAGAACTTA TACGTTTAAC 600  
ATCTCATCCT AAAGCAAGAA CAATTGTGA 629

45

(2) INFORMATION FOR SEQ ID NO: 1315:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 399 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1315:

55

ATACAGGTAC GTTCGTTATC AATGGTGCAG AACGTGTAAT CGTATCTCAA TTAGTTCGTT 120  
 CACCATCCGT TTATTTCAAT GAAAAAATCG AAAAAAATGG TCGTGAAAAC TATGATGCAA 180  
 5 CAATTATTCC AAACCGTGGT GCATGGTTAG AATATGAAAC AGATGCTAAA GATGTTGTAT 240  
 ACGTACGTAT TGATAGAACA CGTAAACTAC CATTAAACAGT ATTGTTACGT GCATTAGGGT 300  
 TCTCAAGCGA CCCAAGAAAT TGnTGACCTT TAAGGGGACC AATGGAATAT nTACCGTAAT 360  
 10 ACCTTTAGGA GGAAAGACCG GCACCTGAAA CCACTGGAA 399

(2) INFORMATION FOR SEQ ID NO: 1316:

15 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 778 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1316:

ATAAACATTT TAAnATGTAA TThAGAAATT TTTTtagTAC AAAATCTTTC TTAATAATGA 60  
 25 TTAAGGAGGT CAGTAATGAT TGAAATTAAC ACATTAACGA ATAATGATTT TAATGAGTAT 120  
 AAGAGACTTG TTTCGACAGT CAATGAAGAA TTCACTCAAG ATTCACATTA TAGTCAAACA 180  
 ATGACTGACA CCTTAATACA TGACATTTTA AATCAAGGTT CACCGAAATG TATTGTATTT 240  
 30 GGCTGTTATG AAAACGAAAC ACTTATCGCA ACAGCTGCCT TAGAACAAAT TCGATACGTT 300  
 GGAAAAGAAC ATAAATCATT AATTAAATAC AACTTTGTTA CTAATAACGA TAAATCGATT 360  
 AATAGCGAGC TCATTAATTT CATTATTAAT TATGCACGGC AGAACAAATTA CGAATCTTTA 420  
 35 CTTACATCAA TTGTGTCAAA CAACATAGnn GCTAAAGTTT TCTATAGTGC ACTAGGATTC 480  
 GACATTCTTG GTTTTGAGAA AAATGCAATT AAAATCGGAA ATACCTATTT CGATGAACAT 540  
 40 TGGCTTTTTT ATGATTTGAT TAATAAGTAA TACAGTTTTA TATATTCTAC rTTTCTCATA 600  
 AATTCAAATC ATATAGGTTC TATTTTTTCAT ACAACTACTC TACTATTGAG TAGTTGTTTT 660  
 TTATTTGATA TGATAACAAT AAGTTTTTTT CAGAATATTC TATGTTTTAG GGGTGTCAAA 720  
 45 ACTTAATGGG TAACCGCAAT TATTCATGGA nTTATCnTAA GCGATTGGGT CCTAAnTT 778

(2) INFORMATION FOR SEQ ID NO: 1317:

50 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 465 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1317:

5 TGCACAAGGT GGTGCAGCAA TTGCAGCGTT CTTTATTATT AAACAAAATA AGAAGTTAAA 60  
 AGGTGTGGCA TCTGCCGAG TATTTTCAGC ATTACTTGGT ATTACAGAAC CGGCTATGTT 120  
 TGGTGTACT TAAAACTAAG ATATCCATTT ATTGGCGCTA TCGTTGGATC AGGTATTGGT 180  
 10 TCAGCATATA TTGCTTTCTT CAAGGTTAAA GCAATCGCAT TAGGAACTGC TGGATTGCCA 240  
 GgATTtATTT CAATCAATCC AGTACATGCA GgATGGTTAC ACTaCTTTGT TGGTATGACA 300  
 ATATCATTcA TCATTGcTAT AACAGTTACT TTAatTTTAT CtAAaAGAAa AGCAAATAAA 360  
 15 GAAGTTGTAG AATAAAAAAA GAGGTATGAC AGTAATCAA GTATCAGTCA TTGCAAATGC 420  
 AATAGGATGA AACTTTAAGC TGTCATACCT TThAATTAG TTATA 465

(2) INFORMATION FOR SEQ ID NO: 1318:

20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 150 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1318:

30 GACTTAATAT AACTGATCTT TTGCTATTAT TGAAACATAT TTATAAGAA AATAGCATTG 60  
 CATAATACCC AAGCAATAAA TACTATAATA TTTTGAAGT AACTAATCAA ACATCTAAGA 120  
 CATGATTGAT AnCACCACAG AAAAATAAGA 150

(2) INFORMATION FOR SEQ ID NO: 1319:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 131 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1319:

45 CCACCTTTTA ACGTACGTAT CCATGAATCA TATGATTAAT TTAATATCAT TATTACTTAT 60  
 TTCTTATCTT TATTnCTTT TTTTCTTCTG AAAAGTAGTA ATGAACCTAT TGATGCTAAT 120  
 AATCCCCAAA T 131  
 50

(2) INFORMATION FOR SEQ ID NO: 1320:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 140 base pairs  
 55

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1320:

TAGTGTCCAA ATGAAAGTGT GGCTACCTAT AGCTGGTCCA TGAAGCTTTA TTTTAACTG 60  
 10 GTTTGTACAA TATTTAAATA TCAAAATCTT CTCGCGnTTT GGACAGTTTT TTTGGTATTA 120  
 ACCATTAATA AACGGAAAGA 140

(2) INFORMATION FOR SEQ ID NO: 1321:

15

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 140 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1321:

CTTATTATAT AATTCTAATC CTAGTACATT ATACATTTTA TCAAATAGTC AACTGGATAA 60  
 25 CTTTGAAAGT GAATGATnCT TTTAAAATAA AGAAGATAAT ATAACTGCT TGATAATGGA 120  
 TTTGTAGTTG ATGATTTAAA 140

30

(2) INFORMATION FOR SEQ ID NO: 1322:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 185 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1322:

40

TCGTTGCAAC ACAGGCACTA TTTTACCTTT ATATGTTGTA ATAGTTTGAT TGCTGCCATT 60  
 TAAACAACCA CCTTTCTTAC TCCACAAATT TACCATGAAT AGCGCGCGCG CCATAGCGGG 120  
 45 ATACTAAAGT GTTCTGCACC TTGCCTGTCT CTTCAAnTT TCGATTACTG TAGAGCACAA 180  
 GTACG 185

(2) INFORMATION FOR SEQ ID NO: 1323:

50

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 148 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55



(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1323:

5 ACCTGCAATT TTCGTTATTC AAAACAATAA CTATGCAATT TCAACACCAC GGAGCAAGCA 60  
 AACTGCTGCT GAAACATTAG CTCAAAAAGC AATTGCTGTA GGTATTCCTG GGTATCCCAA 120  
 GTTGGTGGTA TGGTGCGGTA nTTGGTTT 148

10 (2) INFORMATION FOR SEQ ID NO: 1324:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 141 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1324:

20 GAAAGCATTG ATGGACAAAG ATGAACCACC AAATGAATGG CGATTAGATT CCAATTGATA 60  
 TGGCTCACGG AAAATTTATG CTACAATTGC GTCCAGTAAA CAGTGGCACT AATAGTCCAC 120  
 25 TTAnGCTCCC TAGTGGATGA A 141

(2) INFORMATION FOR SEQ ID NO: 1325:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 204 base pairs  
 30 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1325:

TTATACTATC GTGAAGGGTT TATTACTCAA TTAATGCCTA AAAAGGATAA AAGTTATTTA 60  
 GTTATTGATA ATTTTAATCG TATAGATACA GACATTTTCC AAACGTATAT TAATGTGTTA 120  
 40 GAAGGCTATG AAGTAACATT ACCACGTTAT AATAAAGACG GTAATATGAT TAAATGGTCA 180  
 CGACAAAAAG ATTCTTTCTA TTAT 204

45 (2) INFORMATION FOR SEQ ID NO: 1326:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 147 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1326:

55

TTTGTTAAAA GTCTTCATT CGGATGAAGC TTTATCTATT GAACGCTCCA AATTATTTAA 120  
 AGCAGCTTTT TCTTTATTAA CAGCTGT 147

(2) INFORMATION FOR SEQ ID NO: 1327:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 530 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1327:

CATTnAATGA AGAAACTGAA CCCnGAACTA TACGACGCAG AAGGCAATTT AATTAATAAT 60  
 AGTAAAACAT CCAGCTTAAT CCATTGATGT GTTATAAAAG TGAAAAGCTC CAATCAAAGT 120  
 TGACGCTCAA ATAGTTTAAC TTTGATCGGA GCTTTTTTAT AATGTATACC GAAAGGTTCA 180  
 AATATTATAT AATGGTAGAA TTGAAAGAGA ATATAAAAAA GTGAGGATAT AAAATGAAAG 240  
 TTAATCCTAA TAATATAGAA TTAATCATT GTGCAGTAAA AGAAGAACAA TATCCAGAAA 300  
 CAGAATTGTC TGAAGTGCAC TGAGCGGTCG ATCTAATGTA GGTAAGTCTA CATTTATCca 360  
 ATAGTATGAT TGGCAGAAAA AATATGGCAC GTACATCACA GCAACCCGGC AAAACGCAAA 420  
 CGTTAAATTT TTATAATATA GATGAACAAC TTATTTTTGT GGATGTTCCA GGGTATGGAT 480  
 ATGCTAAAGT AAGTAAAACA CAACGTGAAA AATTGGGAA AATGATTGAG 530

(2) INFORMATION FOR SEQ ID NO: 1328:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 153 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1328:

AAGAAAGTTT GATCTAGGCC AACCTTTCTA ACAACGATAC GACAGTTTAA TAATGTCTCA 60  
 TATCTTGACT TCCCATGATG ATATGGTCGT TAATCACATC AATGACTTAA ATCTGGATna 120  
 ATAGATGCCA ATGGATCTTG AAAAATCATT GTA 153

(2) INFORMATION FOR SEQ ID NO: 1329:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1329:

5 TGTAGTTCGT TTGTGCTCTA ATTAAACGGT CGAAACCATG GATTAGACCT GCGATTACAA 60  
CTGCAATGAT ACCTGAAGCA TGAACCTCTT CTGnTAAAAA GTATACGACA AAAGG 115

(2) INFORMATION FOR SEQ ID NO: 1330:

10 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 112 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1330:

20 AACAAAGTTAT CTACATCTGC TGATAGGCAT ACTATTACTA ATAAATAATG CATCTTTTGT 60  
CCAGATGTTT TCTTAATCAA TTGCACCAAC GAATGGCACT CTCATCTGTA Gn 112

(2) INFORMATION FOR SEQ ID NO: 1331:

25 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 203 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1331:

35 TTCATTGCAG ACAnTTGGTG AACCATGTGG ACGAACTAGT CCTAGATTAA GATAAGAGAT 60  
TAGTGAnCAT TGCCACCACT GCAATTAAAC ATTCTTGGA AAATTAACCTT AAGTTAGAAT 120  
CTTAATGCAT ACAGATACGG CGAAGATGAT GCCAAAGAAC GTCACGACTT TATGATGATG 180  
ACTGAACCCA GTTTTACGG AAG 203

(2) INFORMATION FOR SEQ ID NO: 1332:

45 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 269 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1332:

50 ATGATGTACT AATATCTAAT AAGCTTGCTA AGTCTTGAGA CCTCATTTTA ATCACCTTTT 60

55

GACTATCTAT TTCTGTTAGT ACGTTTGACA TATTAATCAC TCCaCyTTAA CGCAaTAWAw 180  
 TTTAWTAGCG TTGGCTATTG TTGTTTAACG CGATGGnATT TACAAC TTGT AACGTAAGAG 240  
 5 AATGAAAAAT AAGCTGnATA TGTGTTTTG 269

(2) INFORMATION FOR SEQ ID NO: 1333:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 142 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1333:

TAGCTTTTGC CCAATATGGT GAATCATGCG CCGTTCTGTA ATAATCTTCA CTGGCATTTC 60  
 20 TTGGAATTTG AACAAATCC GTTCATTTT TATAGAnTGC TTAAATGGTA CAGCTGAAAA 120  
 ATCAAAGTAA TGTCTTTTC TG 142

(2) INFORMATION FOR SEQ ID NO: 1334:

(i) SEQUENCE CHARACTERISTICS:  
 25 (A) LENGTH: 211 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1334:

ACTGATGCCC AATATGCATC TTGnCAATTG CAGGTGTGCA TGAATAACA CATGACAAAT 60  
 35 CTGCCTGACT TTTTGCTGAC CCATAAATAA TTGGnCTAAC TTTTGCATC TTGATCTTGC 120  
 ATCCTTGCCT TCCTATTTAA AATGCTACAA ATAAATTTGC CGGCGAGTGA ATTTTAATGT 180  
 40 TTTACAACGC TGTTCATAAC CTGGGAATAA G 211

(2) INFORMATION FOR SEQ ID NO: 1335:

(i) SEQUENCE CHARACTERISTICS:  
 45 (A) LENGTH: 129 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1335:

CTTGAATCTC TTGTGCCTCT GTGATGTATC ATCAAATTAT TTGCACTGCT TCTTCTTTTA 60  
 55

TCCGCTCGC

129

(2) INFORMATION FOR SEQ ID NO: 1336:

5

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 633 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1336:

15 CATGATGGCn TCTTACCAAA GGCGATTTTA AGAGCAATGA TACCAAGATA TTTTAAATAC 60  
 TGATCAAAGT TCAGGTGGTA GCACAATTAC ACAACAACCTT GTTAAAAATC AAGTTCCTTAC 120  
 CAACGAAAAA ACATATAGTA GAAAAGCAAA TGAATnCGCC TAGCAATTAG ATTAGAACAC 180  
 20 CTACTCTCAA AAGATGAAAT TATATATACA TATTTAAATA TAGTTCctTC GGTAGAGATT 240  
 ATAATGGCGC TAATATTTCC GGAATTGCAT CCGCTTCATA TAGTCTATTT GGTATTCCAC 300  
 CAAAAGATTT ATCAATTGCA CAATCTGCAT ACCTTATCGG TTTGTTGCAA AGCCCATATG 360  
 25 GCTATACACC CTACGAAAAA GATGGAACGT TAAATCGGA TAAAGATTTG AAATATAGTA 420  
 TTCAAAGACA ACATTATGTA TTAAAGCGTA TGTTAATCGA AGATCAAATC ACTGaAAAAG 480  
 AATACAACGA CGCATTAAAA TATGATATTA AATCACATTT GTTAAATCGA AAAAAGCGTT 540  
 30 AATTGATGCT CACTTTTTAA AGTAACCACA ACAATGAATC CAAATATTAA AAACAGCAGT 600  
 AAGATTATTT TCAATTAGAA AATTTCTCAC TGC 633

35

(2) INFORMATION FOR SEQ ID NO: 1337:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 317 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1337:

45 ATCAATATTT AGCAGTTATC ATTATGCTTG AACGGGTGGT AAAGGCGGAG AAGTCATCCA 60  
 CTTTTCTCTA TACTACAAGG ACCTTTACTT TAAACAACG AATTACAAA ATAAAAGGCA 120  
 TAATTTCTTT TCTGTCACAT CGCTCATTCT AACTACTAGA CTTTTAAAAT CGTTCCTGTA 180  
 50 ATTTAACTC AATCAACTnT CAATTAATGA TGCATAATAT GATTATAAGT ATAGTAGTTA 240  
 ACTTCAAATA TCTTAGAAAT GTCCTGTACT ATATCTCTTT TATTCTCAA AGTCATAGGT 300

55

## (2) INFORMATION FOR SEQ ID NO: 1338:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 125 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1338:

TACGGCATAT ACCTCGTTCA TCAATGTTTCG TAAACATTAT TTAAACATC TCTTACATCT 60  
 TGC GTTGGAA GTTCTTCATA GTCGAATTTT ATTGTnTTAT CAAAGTTTTC CATTTGCGAC 120  
 ACTCC 125

## (2) INFORMATION FOR SEQ ID NO: 1339:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1339:

GAGCTTCGTT CCATTGTTAT CAAACGATTG CCATTCTGAA ATGCTGTAAA TAGCATGCTT 60  
 CAAATCATCT TGTGCCTGCA GCAGTTTCTT TGnAATATGC TTCATATCAT T 111

## (2) INFORMATION FOR SEQ ID NO: 1340:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1340:

TCACACGTTT AGTTTTCTAT GAATACCAAT ATTTTAACAC CATGTTTAGC CAATTTGTCT 60  
 GCTAAATTAA TCGTGTTTGT CCTCCAAATT GACACGCACC TTTAGTTTTT CTAAATAATG 120  
 ATATCATCAC ATCTCTCAGT TAAAGGTCAA AnATATTG 158

## (2) INFORMATION FOR SEQ ID NO: 1341:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1341:

5 GCTTCAGGTC AATTAAAACG TTCAAGAGCT TTCACATCTC ACTTATTTCGC AAACAAGAGC 60  
 ACTAAACAAA AACGTCAATT ACGTAAAGCT AGATTAGTGT CTAAGAGCGA TATGAAACGT 120  
 GTAAACAAT TATTAGCATA CAAAAAATAA GAACAAATAC AGAAATCGGT AGGAATTACC 180  
 10 TAAGGAGGAA TTTTATATGC CACGAGTTAA AGGTGGAACA GTAACAAGAG CGCGTCGTAA 240  
 AAAACGATT AAATTAGCTA AAGGTTACTT CGGTTCAAAA CATACATTAT ACAAAGTAGC 300  
 TAAGCAACAA GTAATGAAAT CAGGTCAATA TGCTTTCCGT GACCGTCGTC AACGTAAACG 360  
 15 TGACTTCCGT AAATTATGGA TTACACGTAT CAACGCAGCA 400

(2) INFORMATION FOR SEQ ID NO: 1342:

(i) SEQUENCE CHARACTERISTICS:

20 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1342:

GTTGAACAAG GGCAACAAAA ATTTGAGCGC AAACAGATTT TTGAATGGTT ATATCAAAAA 60  
 30 AGAGTAGATT CGATTGATGA AATGACGAAC TTATCGAAAG ACTTACGACA GCTTTTAAAA 120  
 GATAACTTTA CTGTTACAAC TTTAACAAC GTAGTAAAC AAGAAAGTAA AGACGGTACA 180  
 ATTAAATTCT TATTTGAATT ACAAGATGGC TATACAATTG AAAGTGT TTTT AATGAGACAT 240  
 35 GATTATGGAA ATTCAGTATG TGTAACGACA CAAGTAGGTT GTCGCATCGG ATGTACGTTT 300  
 TGTGCTTCTA CACTTGGCGG CTTAAAAAGA AACCTTGAAG CTGGCGAAAT TGTTCACAA 360  
 GTTTTAACAG TTCAAAAAGC CCTTGATGCT ACAGAAGAGC 400

40 (2) INFORMATION FOR SEQ ID NO: 1343:

(i) SEQUENCE CHARACTERISTICS:

45 (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1343:

GAAAATTTCA TCAGGTGTTG GCgTGGAACG TACATTCCCA TTACACACAC CAAAATTGA 60

55

TTTACGTGGT AAAGCTGCTA GAATCCAAGA AATTCGTTAA TCAGCATTTA AACAAAGCTA 180  
 TGTATGAGTC AAATTCGACT CAAACAATAA AGCCATCTAG GTCACCTTTA TGGAGTGATA 240  
 5 TAGATGGCTT TTTTGTCTGT TTAGTTAATG TAAAGTTGAT AATGTAATTG TTTATTCCTT 300  
 CTCTATTTCAT AACGTGTTTG CTCAAAATGG TTATATAAAC AAAAATCTAC TAAGTGCCAT 360  
 TGAAAAGGAC TTAGTAGATT TATTAAATAT ATGCGTAnA 399  
 10

(2) INFORMATION FOR SEQ ID NO: 1344:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 134 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1344:

AACCTTACAAC ACCAGGTAAT AACAGCAATA AAGGCACCAG TTAGTGCGGT AATGCCAnTA 60  
 TCTAGGCCTT TAGGTTGCCA TAGTACGAGA TGTAGAGGTA CTAGAGGAAT GAGTGTCGCT 120  
 25 AAAGTTGTCTG TCGT 134

(2) INFORMATION FOR SEQ ID NO: 1345:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1345:

TCATAATAAAA CAAGTTCACA TGAATCACAA CATCTGAAGA CAATGTTCAA AATGAGGCTG 60  
 40 GCACAATAGA TGATCGCAAG TCGnATCATC ACACAGTACT GAAGCAAGA 109

(2) INFORMATION FOR SEQ ID NO: 1346:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 113 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear  
 45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1346:

CCATATCTGG nACGACCGAC ACCTTTACCA CCAACGATTG GTGCCATTG TTTGCATAAG 60  
 55



## (2) INFORMATION FOR SEQ ID NO: 1347:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1347:

CAATTGAAAG GTGAATTTTA TAGGTCCATG ACAAATAAG GCTTGTTAAA GCTTATTAAC 60  
 ACAGTTTCAT CAAATAGTTA AATTAGTTTT TGTTTTGCAA TAAATTGGGT ATAGATTACA 120  
 AnTG 124

## (2) INFORMATION FOR SEQ ID NO: 1348:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1348:

CATCAGTGGC CTGATCACCC CAACATTTGA CATCAATGCA TACCAGTTGA TTTGAACAAT 60  
 GATTGCATTG AGCTATCATC AAGTTTGTCT TTAAGCTACT AAACCCACGA ACCATGTTAA 120  
 CCCC GTGGTC ACCATCACCA ATTGCTCGAT CTAATTCAGT TAATTCAGAT TCATGTTTTT 180  
 TAAACGTTTC TTCTAAATTT AATAAACGTG CTTTCATATC ATcAtTTCAT TGTGCaCtaT 240  
 AAaTGtATAT TaTTCATATT CACTTCTnAt TTAAAGTATG ACTTGTTGTT GGTGCTAAAA 300  
 ATGChTCCAA ATATTCTGGT TTATnAGGCA CGATAGT 337

## (2) INFORMATION FOR SEQ ID NO: 1349:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 162 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1349:

CAGCACGTAA ATACAACAAA GCGATCCCCA GCTTGTGGCA CATCATTAAT ACCTGTAATT 60  
 TCAACAGGCG TTGATGGACC AGCCGTTTTG ATTCTTTGAC CTAAGTCATT ACATGCCGAA 120

## (2) INFORMATION FOR SEQ ID NO: 1350:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1350:

```

CAATTTTACT TTGAATTTCT TTTTATCTT TTCTAGTTTT ATCGTCCCAC TCTTCAATCC      60
ATTTTPTAGC TTTATCTTCA TTATTAGTCA ACTTGCCTAT TTCTTTTAAT ATTcTTTATG      120
ATTGTATTTA TTGTATGTAT ATGGGATTGT TGGCGCTATT TTTTGGTATT TTTTATATT      180
TTTATCCATA GcATCTACAA CAATTAAATC TGGTTTtGcT TTAGCAACTC TTTCAACATC      240
ATTTTCTCCA ATATAATCAA CCCCTTTTAA ATAAGTTTT AAAATTGAAG AATCTTTAGT      300
TATATCTGAA ACAGCAATTG GTTTGATTCC TAACTTTATA AAATCACCAA CATAAAATCC      360
AGTTAATACA GCAACTCTTT TAAGGTTCTC nGGGACTTT      399

```

## (2) INFORMATION FOR SEQ ID NO: 1351:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1351:

```

TAAAACTTAG GCGGTTTTGC ATGATTATAG CGCTCAACAC GTTGAAATT ATAGGTCATC      60
TCTGGTATTC TTGTACGATT CTTTTTCCAA TCTAAATCAA AGTTTTCAAT TTCTTCTTTT      120
GAGTTTAGAC TTAATCGATC ACGTTCATGT TCTTTAAAAG ATGGAATAAC TTGTTTAAGT      180
GACCCCTTCCA TTCTTAATTG ACCATGTGAA AACCAAGCTA TGTA GTTACT CACTTGTGaA      240
ATTTTATCAA TATCATCACC AATTGACACA ATCGTTAAAT TATTTTCAAT ATAATCATTT      300
GTTAATTCAA TCGCACGTTT CATAAATTGT GGTGTAAAT AGTCAATAAC ATGATTTAAA      360
ATAATAATAT TTGATTTTGA TGAGCGTGCA ATACTTAATA      400

```

## (2) INFORMATION FOR SEQ ID NO: 1352:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 117 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1352:

5 AAGGGAACAA AAGCTGGAGC TCCACCGCGG TGcGgCcGCT CTAGAACTAG TGGATCCCCC 60  
GGGCTGCAGG AATTCGGCAC GAGCATATCT AGTATTTTAG GACGGAGGnA GTACATT 117

(2) INFORMATION FOR SEQ ID NO: 1353:

10 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 153 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1353:

20 AGTTCAGGAG AGTTATAAAT ATTAGGGTGG TACATGCCCCG AAATCATTGG AATTGTTAAA 60  
GTAGATTTTA CAGTTTAGAG ATAACAGACA TGCTATATG AAGGGCTGTC TACCCTCGTA 120  
AGGTTATATC CTACAGnTGA ACGTATCAAG CTT 153

(2) INFORMATION FOR SEQ ID NO: 1354:

25 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 159 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1354:

35 TGTTGTAACA GCTCTCTATG TTTACGTTGG AAGTATGGTT TATTTTTCAT CTTACATTTT 60  
AGTTCCTTAT TAAAAGTGA TAGAGCAATT GCACTCGTAG GTCAAGAAGC GGGATGCCAA 120  
CACAAAGTTC ACAAGAnAAT ACACTTTTGA AAATATTGG 159

(2) INFORMATION FOR SEQ ID NO: 1355:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 118 base pairs  
45 (B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1355:

50 CGnCTTCCTT CAACCATTGT AGAAGTTGTC TCATATACTT ACTACGGCTT GCTAATACTC 60

55

## (2) INFORMATION FOR SEQ ID NO: 1356:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 110 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1356:

GGATTCATTG GTGCTTATTT ATTTACATTC AATAATGAGA nCTTTACACA ACCAATTGGT 60

CAAATTATAG ATGTCAACAT GTTCTTCGA CACCTACAAA AGATGCACAA 110

## (2) INFORMATION FOR SEQ ID NO: 1357:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1357:

TAATGGTGGG GTATATTTAT ATTAGTACCG AATTTTAGGn GCCTCACTAT CATTTATCAA 60

ATTATTTAAA GTGGGATCCT ATCGCAATCA ATTGGCAGGG GCAGAATAAT GGCATTAGTC 120

GTTGAAGATA TCG 133

## (2) INFORMATION FOR SEQ ID NO: 1358:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1358:

GTGTCGGTAA GTCCACTTTC TTAAATCATT ATCGTCCAGA ACTTAATCTT GAGACAAATG 60

ATATATCAAA ATCATTAAAT CGAGGAAAGC ATACTACAAG ACATGTCGAA CTATTCGAAC 120

GTCAAAACGG TTATATTGCA GACACACCTG GATTCAGTGC TTTAGATTTT GATCATATAG 180

ATAAAGATGA AATAAAAGAT TATTTTCTTG AATTAAATCG ATATGGTGAA CATGTAAGTT 240

TAGGAATTGT AATCATATCA AAGAACCTAA TTGTAATGTT AAGCATCAAT TAGAGATAGG 300

GAATATTGCG CAATTTAGAT ACGACCATTA TTTACAATA TTTAATGAAA TTTCCAAATA 360

## (2) INFORMATION FOR SEQ ID NO: 1359:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1359:

CTGTTT TAGT CTTATTGATT GCCTGACCAT TAACTAAGTA ATTTGTGTTT GAAGCGGTTA 60  
 ATTGAGCAAT GATTGGAATG TCGTATTTCT TTCTCGTTCG TGAAATGACA TTTGTTAAC 120  
 CTTCTAGGTC GTAATACGTT TCGAAAAGTA GCGCGTCAAC GCCTTCTTCA ATTAAGGTGT 180  
 CTATTTGAAT TCAGTATGAT AAAGAATAGT TTGTAAGCTG ATATCCCCCT GTTTGGATAC 240  
 CTCTAAACCC CACCAACTGG GGCCCAATAT ATACGTAAnC TnTAATTGGC nGGCTTTTTT 300  
 GCGATGCGAC GGGGGGCTGG AGGATGCTTA ACCTTAACCT CCAGACCGAA CCGTTTAACC 360  
 TTTCCAAAAT TGCACCATAG GAATGGGTGG AT 392

## (2) INFORMATION FOR SEQ ID NO: 1360:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 160 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1360:

CCATGGTTAT TTTCTTCACA TTTCATGTAT ATATATTTGT TTATTATCTG TCTCTACTAG 60  
 ACTGTAACCT CCAACATATC TGTTTTATAA ACCAGAGAGC AGTCATTCAA TAAATAAACA 120  
 GATCTGAGGG CCAACTGGCA TGTTGTCAAC TTATGATATT 160

## (2) INFORMATION FOR SEQ ID NO: 1361:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 148 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1361:

GTATCCTAAA GATTCAGTTA ATCGGAGCGT TGTATTGCAT GAAGGTACAT TGCGGAATGC 60

ATATTTATTTC ACGATnTTAT TTAGCGAC

148

(2) INFORMATION FOR SEQ ID NO: 1362:

5

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 147 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1362:

15

AAAATTACTA TGAAGATTGC ATTAGGATGC GACCATATTG TTACAGATAC AAAAATGCGT

60

GTATCTGAAT TTTTAAAATC AAAAGGACAT GAAGTCATTG ACTGACACTT CACTCATnAG

120

TGGCGACAGT GTACGTATCA GACTTAG

147

20

(2) INFORMATION FOR SEQ ID NO: 1363:

25

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 108 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1363:

30

CTGGCAAAGA AGACAACAAC AAGCTGGTAA AGAAGCAACA ACAAGCCTGG TAAAGAGACA

60

ACAACAAnCT GGCAAAGAAG ACGGCAACAA GCTGGTAAAG AAGCAACA

108

35

(2) INFORMATION FOR SEQ ID NO: 1364:

40

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 153 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1364:

45

GACAATGTTG CTGTAATGGG GAAGGnAATG GGTGGTACC GCGAATTGAA TAATTTAAAA

60

CCGTAATATA TAATCGTAAT TGTTAAGCCC TCATTTTAT AAATTTTGGA CCTCTTGAAA

120

AAGTTACGTT TTCAAGAGGT TTTATTTATC CTA

153

50

(2) INFORMATION FOR SEQ ID NO: 1365:

55

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 184 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1365:

TAAGAGAATT ATATGCATTC CAAACGAAAC nAACAGAAAA ACGGACCAAA CTAACGTCA 60  
CAAGTACAAT CGCTGTACTA CTGCAAAACA CGCAAAACGA ACACTTACGT ACACACAAAA 120  
AGACCACCAT TCACGTCGGG ATTATTAAAA AGGTAGTCTC GTACATTTAT TAAACTACTT 180  
ACGT 184

15

(2) INFORMATION FOR SEQ ID NO: 1366:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 452 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1366:

ACATTAGATG GGTCAATCAT GTTATACACG GTGATTTAGG GGAGTCAATC AAATATAAAA 60  
GGCCGGTAAT TGATGTTATT GAGGAAAGAA TTCCAAATAC AATATTACTC GGTGCTATGT 120  
CATTAATTAT TACTTATATT ATCTCATTG CTTTAGGAAT AACGTCAGGT AGATATTCTT 180  
ACAGTTTGAC GGATTATACT GTGCAATAT TTAATTATTT GATGTTAGCC ATTCCATCTT 240  
TTATTGCGGG AGTATTGCA ATTTnTATTT TTTCTTTTGA ATTACAATGG TTCCCGTTTC 300  
AAGGTTCTGT TGATATTAAC CTTAAAGAAG GTACTTTTGA ATATtATATG AGTAAATAT 360  
ATCACACATT TTTACCTGCA TTCACTTTAG GTTTATTATC TACTGCTGGT TATAwTCAAT 420  
ATTTACGTAA TGaTATTATT GAAAATTCTA AA 452

40

(2) INFORMATION FOR SEQ ID NO: 1367:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 141 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1367:

50

TTGTGAGTAA TTGGACAATA TAAGTGTGG TCTGGATGG CATATCCTTG GTACGACCTG 60  
GGCAACTTGC TTCATAGCGC AGTTAGGAAC TGATCAATCA TTGGCGTTTT GATACCTAGC 120

55

## (2) INFORMATION FOR SEQ ID NO: 1368:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 126 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1368:

TGGTGCAAAT TAAAACGGTT GCATATGCAC GTACGACGTA TTGCTAAATA CAATCAATTA 60  
 TTACGTATCG AAGATGAATT ATTTGAAACG CTAAATATGA CGGTATCAAA TCATTCTATn 120  
 ACTTAG 126

## (2) INFORMATION FOR SEQ ID NO: 1369:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 160 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1369:

TGnAAAGTTC ATCAGGGAGC CATTTTACA ACACAGGGCA CATACGGGTT GTGTTTAGGT 60  
 GCAATTGCCC CAAGCGGACA AAGCATTATT TAAAGTTTCA AGTTCTTCAA CGATTTATTA 120  
 GTGCACAGGA TCCTGTTAAG AGGTATTTTG AAGACTTCCG 160

## (2) INFORMATION FOR SEQ ID NO: 1370:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1370:

AGTAATTCTG CAAATGCCGC AGATAGCnGT ACTTTGAATT ATGAGGTTTA CAAATACAAT 60  
 ACCAATGACA CGTCAATTGC TAATGACTAT TTAAATAAAC CGGCAAAGTA CATTAAGAAA 120  
 AATGGTAAAT TGTATGTTCA AATAACTGTC AACCACAGTC ATTGGATTAC TGGAAATGAGT 180  
 ATCGAAGGAC ATAAAGAAAA TATTATTAGT AAAAACACTG CCAAAGATGA ACGCACTTCT 240  
 GAATTTGAAG TAAGTAAGTT GAACGGTAAA ATAGATGGAA AAATTGACGT TTATATCGAT 300



AATGGACCA<sub>n</sub> CTGATGTAGC AGGTGCTAAT GCACCAGGTA

400

(2) INFORMATION FOR SEQ ID NO: 1371:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 345 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1371:

|            |                         |                         |            |            |                         |     |
|------------|-------------------------|-------------------------|------------|------------|-------------------------|-----|
| CATCAAGAAC | ATGTGAGACC              | ACAATTGAA               | TCACCTGAAA | AAATAAATAA | AGACATTGTT              | 60  |
| GGATGGATAA | AATTATCAGG              | AACATCATT               | AATTATCCAG | TACTACAAGG | TAAGACAAAT              | 120 |
| CACGATTATT | TAAATTTAGA              | TTTGTAGCGA              | GAACATCGAC | GTAAAGGTAG | TATTTT <sub>y</sub> ATG | 180 |
| GATTTTAGAA | ATGAATTGAA              | GAATTT <sub>n</sub> AAT | CATAATACTA | TTTATACGG  | GCACCATGTC              | 240 |
| GGTGATAATA | CGATGTTTGA              | TGTGTTAGAA              | GATTATTTAA | AGCAATCGTT | TTATGAAAAA              | 300 |
| CACAAGATAA | TTGA <sub>n</sub> TTTGG | CAATAAATAT              | GGTAATCTCC | ATTGC      |                         | 345 |

(2) INFORMATION FOR SEQ ID NO: 1372:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 154 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1372:

|            |            |            |            |                        |            |     |
|------------|------------|------------|------------|------------------------|------------|-----|
| TTGAAAAGCA | GTTTGGATTT | ATGCTCAAAC | CATGGACGAC | GGTTAGGTTT             | ATGAATGTTA | 60  |
| TTCCAAATAG | GTTTCTCTAT | AAAACTAGT  | GGAAAGTGGA | AAAAA <sub>n</sub> AGT | GGACCTTCGA | 120 |
| TAATACGATG | TATTTATCGT | TAGAAGCAGT | AATA       |                        |            | 154 |

(2) INFORMATION FOR SEQ ID NO: 1373:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 136 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1373:

|            |            |            |            |            |            |    |
|------------|------------|------------|------------|------------|------------|----|
| GAGCCTAATT | ATTCAAGCCA | AATCGCATAT | GAAATTGATA | AAGAAGTTCA | ACGAATCGTT | 60 |
|------------|------------|------------|------------|------------|------------|----|

CTATACnAGA ACTATC

136

(2) INFORMATION FOR SEQ ID NO: 1374:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 358 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1374:

|            |             |            |            |            |            |     |
|------------|-------------|------------|------------|------------|------------|-----|
| ATCTTTAACA | ATTAAAAACCA | TACTATCTTG | AATCATCATC | AAATTTAACG | CATGTGCGTC | 60  |
| AAGTTGTTTC | ACTTTAAAGA  | CTTCATTATT | AAGACCGACC | TTAGACTGCT | TTTTAAAAAT | 120 |
| AGGTACATTC | GTAATCATAC  | CTATACTTTG | ATTGTCTAAG | TGTAATTTGT | TTTGGTGATA | 180 |
| TCGATTATAA | TCTTGTGCAG  | TAAAAGCTGT | AATCATTACT | GATTGTCTTG | AAAATATCGC | 240 |
| GCCTTCATTA | CCAATGAAGT  | CTATTGGaAT | aTCATCACTA | GCCTGTTTTA | ACTTGTAATA | 300 |
| AGCACGATTC | TnTTCTAAAG  | AAGCTCTAAA | TAATGTCGTT | TCATATACTT | TGAAGTCT   | 358 |

(2) INFORMATION FOR SEQ ID NO: 1375:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 122 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1375:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| ATATTGTGTG | CTAAATTTGC | TTAAGTATGT | TTTTTGTTTG | nAAGTAAGCA | TATGTTATTG | 60  |
| TCTTTTTAAT | TGTTGTAAAA | GTGCTGTTTT | CATAGAATTA | ATATCAGACA | TCTTTATTAG | 120 |
| TA         |            |            |            |            |            | 122 |

(2) INFORMATION FOR SEQ ID NO: 1376:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 467 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1376:

|            |            |            |            |           |            |    |
|------------|------------|------------|------------|-----------|------------|----|
| CATTTTCTTC | GGTTTCTGTC | TTTTTATGCG | TAGATTTATT | TTCTTGTTC | TGGTTATTAC | 60 |
|------------|------------|------------|------------|-----------|------------|----|

CGATAATTAC GATGGTAATA AGAAGTTTTT TCAAATATAA CGCCTCCATG TTAATGAAAA 180  
 GTAGTTGATA CGTGAAGCTA AATAATTnAT TTCAATATTG CCATAATCAT TTTAAAAAAT 240  
 5 AAATATTAGA AAAGTAGGCG ATATTAATAT TTTCATTGTt TTTTGTGTAC TTCAATTAGT 300  
 ATAACAAAAC TGTATTGTAT TTATAAATAT AATCATTAGT ATTTTATATGG CTGAAAAAGT 360  
 TATAATAAAA GTGTAAGGAA TAAATATTTT GTATGGAAAA GAGAGATAAT TATGAATAAA 420  
 10 ACCAGTAAAG TTTGTGTAGC AGCAACATTA GCATTGGGCA CACTGAT 467

(2) INFORMATION FOR SEQ ID NO: 1377:

15 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 128 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1377:

AGGTGTTAGA ATTTATTTTA AGTGTATATAC GTGTCTTCCA GAAATTGTAA TGGCATTATA 60  
 25 TTTATnAAAG TGTTGGCAGG TTATTTTCAG GTGTATTAGT TTAGGTATCA TTCGTAGTAT 120  
 GCTTGGGA 128

(2) INFORMATION FOR SEQ ID NO: 1378:

30 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1378:

40 GGACGCTAGA GGATCCCGGT CTGGAAAATA TCGTCCAGAA CTTAGAAATA TGAAAATATT 60  
 CCCAAGACCA ATCGATAATA TATTGCCAAT ATGGCGTGCT GTTGGTGGTC CACCTGCAAG 120  
 TGCTATTAAA GCGGGAAAAC AAGGTGTGCC AATGATGATT ACAACCCTTG GTGGCCCAGC 180  
 45 AATGAACTTT AAAGGTTCTA TakATGCTTA TCGTCAAkCG GCAACTGAaG CAGGTTTCGA 240  
 TGCTTCGCCT AAGTCTTTAC CAGTAAGTAC AGCGAGTCTG TTTTATACAG CTGAAACAAC 300  
 TCAGGATGCT ATGAGAGAAT TTTATCCACA TTTGAATACA GGGATGTCAT TTATTCGTGG 360  
 50 TnGTTGGTTA TCCGAAACAG CAATnGCTAA TTCGTCAGTT 400

(2) INFORMATION FOR SEQ ID NO: 1379:

55

(A) LENGTH: 108 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1379:

10 AACTACAACA ATTTAACGAC CAACCTTAAA AnAATACGCT CTTATGCATT GGATTAGTCC 60  
 TGATTATACA ATTTAACTGA ACAAATACCC ATCATTTAAA AGACTTAG 108

(2) INFORMATION FOR SEQ ID NO: 1380:

15

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1380:

25 AAGTGGGGG AATCAGTATG TTACATTTAC ATATATTAAG TATTAGCGAT TATTTTATTT 60  
 ATCGCTACAT ACTTAACCAT TTCAAAAATT CAAGGCGGnT CACCATTTTC CAACCCGT 118

(2) INFORMATION FOR SEQ ID NO: 1381:

30

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 114 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1381:

TCATGAAAAC ATTTATTTTA AAATTGATA TTTGTTCAAT AATATTCGAA ATTAACThT 60  
 40 GTGTATAGAT TTTCTTTATA TCCTGAGAGA CATGTACTAT AATGTTTGTG AATA 114

(2) INFORMATION FOR SEQ ID NO: 1382:

45

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 165 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1382:

CGGTATTGAT CATATAAATA GTGTTTAGAT GCTATAGTCG GnTGACTTAA GTAATTTAAA 60

55

GTTTTCTTCT GCCTTGCTTA AAGATATATG ACAGGGTGCT GGCAT

165

(2) INFORMATION FOR SEQ ID NO: 1383:

5

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 111 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1383:

15

TTTGGTGTGA TGGAGTATAT TTAGGTGTGG AAATCAAGAG GGAATTCCAT TTCAAACAT 60

CCAATTAGAG TCGnAATAAG AACTCGCTAT CGGTCCAATT AACTGATTCA G 111

(2) INFORMATION FOR SEQ ID NO: 1384:

20

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 144 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1384:

30

CATTTAAATA ACGTTGTGAC CATGTGCTTT ATGCTATGTG CTAGAAAATC CATGTTTTTA 60

TCTAATTTCT TAATAAATTG ACATTAAGTT GGATTCTTGT CnCTTCACG TTTCGACATT 120

GGATGACTGA ACGCATGAAA TCAG 144

(2) INFORMATION FOR SEQ ID NO: 1385:

35

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 103 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1385:

45

TCGTTGTGCA GCAACTGCAT TACGCTGTCT CATTAAATGTA AGCGCAATGG CCATTGTT 60

TTTCnATAGT GGAATACTTG TCAAAATTGA ACATTGTATC TTC 103

(2) INFORMATION FOR SEQ ID NO: 1386:

50

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 533 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1386:

5 CCAGnACAAA TACAACGTTA TATTCAACAA TTAGAAGACT TAGnATAGAT ATAAATTGAG 60  
 GGAGGACATC GATATGGCAT TTGAAGGGTT ATCAGAAACC TTGCAAGCGA CGATGCAAAA 120  
 AATGCGTGGT AAGGGTAAAC TTAAGTGAAGC TGATATAAAG ATAATGATGC GTGAAGTAAG 180  
 10 ATTAGCGTTA CTTGAGGCTG nACGTAAACT TTAAACTGGT AAAAGAATTT ATTAAAACAG 240  
 TATCAGAACG CGCATTAGGT TCCGATGTAA TGCAATCATT AACACCAGGG CAACAAGTTA 300  
 TTAAATAGT TCAAGATGAA TTAACGCAGT TGATGGGTGG AGAAAATACG TCGATTAAAnA 360  
 15 TGTCAAATAA ACCACCTACT GTTGTATGA TGGTTGGTTT ACAAGGTGCT GGTAAAACAA 420  
 CAACTGCAGG TAAATTAGCA TTATTGATGC GTAAAAATA CAACAAnAAA CCTATGTnAG 480  
 TTGCAGCAGA TATTTATCGT CCAGCAGCGA TAAATCAATT ACAAACAGTA GGG 533  
 20

(2) INFORMATION FOR SEQ ID NO: 1387:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1387:

TTATTTACAA GCCATTAATA TATTTTAGGT TTGTCTGCA TCGATTCATT GGTGCTATTT 60  
 TATTTACATT CAATAATGAG ACTTTTACAn CAAACCAATT GGTCAAATAT AG 112

35 (2) INFORMATION FOR SEQ ID NO: 1388:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1388:

ACACCTACAG TTAATAGTAT CAGTGACAC TAAAGTCCTA ATACTTTCAA CCATGACTAA 60  
 TGATGTATCh TCTTGCCCAA CGAACGCGTT GTGCCAAATT GAATTAGACT GGACGGAC 118

50 (2) INFORMATION FOR SEQ ID NO: 1389:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 147 base pairs

55

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1389:

CGACGACACA ACTTTATAAT AAAATCTTAG ACAATAACGA AGGGTATTAA CAGAACTTGG 60  
10 TGCTGTTAAT GCAAGTACTG GAAAATATAC TGGTCGTCGC TAAAGCAAAT TTTTGCTCTG 120  
ACCTnCAATG GtACTTGTTG GGAATA 147

(2) INFORMATION FOR SEQ ID NO: 1390:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 161 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1390:

TTTTTGATCA TGATTTTGG GCATGGATCA ATCACTTGCT TGGCCAATGG TCTTTCAACA 60  
25 ATTTGGATAT CTGACCTTAT TCGCTTTATC TAGCACTTTT GnCAATTTGT TGGCATTGGA 120  
AAACATGTGT TTAGATTTT GTATGCCTCT CGCAGGCTTT T 161

30

(2) INFORMATION FOR SEQ ID NO: 1391:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 102 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1391:

GCCGCACGCG CGCGATTCTC GGCCTAATAA GAAAACAAAT AATTCCAATT CATATATGnA 60  
40 CATTTTTGCC TCCTTATTTT TTGAAAATGT GGAATTGGAA TT 102

45

(2) INFORMATION FOR SEQ ID NO: 1392:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 412 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1392:

55

AAAATGCTAT TAACAACGTA TTAAATAATC AAGATTACCA TGGTATTAAA GATAAACCAT 120  
 TCGCATTATT CGTAACTGGA TTTTTCGACA ATGTAACAGA TAATACTGTT GGTATTAACT 180  
 5 TTAAGACAAA AGACGGTTCA ATAGCAGTAT TTATGCGTCC AGATATTGGA GAAACATTTA 240  
 GCGAGTTTAG AACATTCTTA GCCGTCTTGT TAATGTTGTT ATTATTTATC TCGATTTCAT 300  
 TAGTTATCGC ATCA<sub>n</sub>CCTAT TCAATCATTC GTCCAGTAAA AAAGTTAAAG CTAGCGACCG 360  
 10 AACGCTTAAT TGATGGTGAT TTTGAAACAC CTATCAAACA AAC<sub>n</sub>CGCAAA GA 412

(2) INFORMATION FOR SEQ ID NO: 1393:

15 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 186 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1393:

AGCA<sub>n</sub>TGGA TTGCAATGAG TTTCTTATAT TTACAAGGTG GTAGATTGAT TGATGTTTTA 60  
 25 ACTGCGATAT TAGCAGTAGT CTAGATACCT AGTCACTGAG ATTTTAGATC GAGTTACACG 120  
 CACATTATCC GATCTGTCTA TATGGATATC CGTATGACTA CCTATCCCAC GGACTGCACA 180  
 TACTGG 186

30

(2) INFORMATION FOR SEQ ID NO: 1394:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1394:

TCTTTAAAAG AATCAGGAGC TTGGAAGAAG TATATCAGGA TCATTAAGTC AACAAATTAC 60  
 GCGATATGAA AATTTGAATA ACAATTTG<sub>n</sub>A AAAGCATGCT TCCGATAATC AGCAAGCC 118

45

(2) INFORMATION FOR SEQ ID NO: 1395:

50 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 175 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55



GGTTACCTCG GATGGATGAT TACTATTTTG GGCTGGGCGC CGGCTTTnGT TATTAGTGGT 60  
 GGCAATAGTG GCAAAGTGTC ACAAAAAAAT CCAATAGCTG GAAACCCGGG TATATTTGGG 120  
 5 TATTAACGCC GGTGGCCGGG ATTTGGCCAA TCGCATTAAT TTAATGGCCA TTGGG 175

(2) INFORMATION FOR SEQ ID NO: 1396:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 132 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1396:

AGAAACTTAG ACGATTAGTA TCATATATTA GAACACnGCA CCGAACTGA AATCATGGCT 60  
 20 GATATCGCAC CTTGAAGAAG CAAAATGCC GCACGACTTG GCTTTGATAT ATTGGCACGA 120  
 CTTACATGGC AT 132

(2) INFORMATION FOR SEQ ID NO: 1397:

25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 121 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1397:

35 AGAGGTCCGG CTATCTATCA AATAAAGTGG TCATTTAAAG CGTACACTTC GGGTGC GTTG 60  
 ATTTCTTACT TTAGGTGTAG GACAATTGTA TCGCATCTAT CTTTACnCTA CCTGCATTGT 120  
 T 121

40

(2) INFORMATION FOR SEQ ID NO: 1398:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 202 base pairs  
 (B) TYPE: nucleic acid  
 45 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1398:

50

CGTTCGTATA ATCTCACTTG CATChTGAAT TGAACAACAT CCTGTCATTT TAAGACTGCT 60  
 AAAhGTACAG CTGAAAACCA AGTAAGTCCG TTTCGTCTGG CTGTGAAATG GATCAAGGAG 120

55

AAACACCTCA TCCAAAGTTC AG

202

(2) INFORMATION FOR SEQ ID NO: 1399:

5

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 165 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1399:

15

CGTTGGATCA CTGATGCATT CATAAATGGG TGAACnTAAT GTAATGTTAA ATCTATCACA 60

GCGCGATAAC AGCAAGAATA TAGTGAACAC CATAAATTGA GCATATCAAT GCCATATTCA 120

TGGATACACA TAGTTCACCT GGTGGTCGGT GAAAGCCTGT AGATG 165

20

(2) INFORMATION FOR SEQ ID NO: 1400:

25

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 107 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1400:

30

ACACCTTTGT TTTTGCAAAG CTGTACCACA AAGTACTGGG TAGAATTCTA CGTTATATGA 60

GnCTTGGCGT ATAGCTTCTT TTAATTCATA AACTGTAAAT TTCTTCG 107

35

(2) INFORMATION FOR SEQ ID NO: 1401:

40

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 106 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1401:

45

TTTGTCTAG nAACATCTGC TTCTAATAAT GATCGATCAG CAGCCATTGT GCTTAATCTT 60

TCATCCCACA TCACAATCTC AATAGAAGGA TAAGCTTCTA ATAATT 106

50

(2) INFORMATION FOR SEQ ID NO: 1402:

55

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 102 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1402:

CAATGTTAAA CCTACACCGT TAACAGCACA CATGATACTA AATTGTTGGG GTGTCATATT 60  
 5 ATACAATGTT GAGTAnTAA TGGCGATGCA GATGAATAAC TA 102

(2) INFORMATION FOR SEQ ID NO: 1403:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 169 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1403:

TTTATTATTT GTGCTACAAC TACTTAAAAA AATCAGTAGA TATAGCATTa AACATATTTT 60  
 20 CATCCCCyTG AATTTTAAAA ACTTTTTCaA AAGCAACACC TCTAAAAATA AATaCAATAT 120  
 ATTATAGCAA ATAGAAATTA TTATTTTGTT AAATTATGTT GTnCATGTT 169

(2) INFORMATION FOR SEQ ID NO: 1404:

(i) SEQUENCE CHARACTERISTICS:  
 25 (A) LENGTH: 106 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1404:

TTAGTTGATA AGTAAATCCG AGTGACATTG GGATTCACCC CAACCGACTC TATTCCAGTC 60  
 35 TGAAATACGT GAACCCATAA nATCCTATGT CCAGATTTAT ATTCT 106

(2) INFORMATION FOR SEQ ID NO: 1405:

(i) SEQUENCE CHARACTERISTICS:  
 40 (A) LENGTH: 309 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1405:

TATTTTTGCA GCAGAGATGT TCGCGACAAG GTTTACGCCA AATTGTCACT GCTACTGCGA 60  
 50 TGTGTATTGC ATGCAAGTGC AGGnAATATA TTGAACATTT AAACGATCAG TTTAATTCGA 120

55

CTTTAATAAG CAATTTGTAC TGA CTGTGCA CATTGCGTCA TGGTCTGTTT TTGTTTAACT 240  
 ATACTATnGG TGCGAAGTAG GCCTATGTTT AGAGGTCTAA CATGCCGTAG GTCTAATGGA 300  
 5 TCAGGAACC 309

(2) INFORMATION FOR SEQ ID NO: 1406:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 144 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1406:

GTGGACCTGC AGTTAATTCA ACGATTTC AA GATGGGCGCC AAGAACGAAA CGTGGCCGAT 60  
 20 ACTTAGGATT CTGGAATCAT CACATAATCG TGTGCATGAG GTGTTTCACT TTGGGGTCTA 120  
 ATGATTCTTC ATGGAAnGTA TAGG 144

(2) INFORMATION FOR SEQ ID NO: 1407:

25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1407:

ACCTTTGCGT CCAGAATTAG CTACATGGTA AAGCTTCGTG TTACTATTTT AGGGATATCT 60  
 35 TCAACnCGTT TCACTTGTAT AATTTGTTTT TGTAATTGGT GAAGTCATAG TATAG 115

(2) INFORMATION FOR SEQ ID NO: 1408:

40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1408:

ATTGGTATTG GCGCTGTAGT ATAGCTTCAT TATCTGATGC CATTAGTATA CGCACACTnT 60  
 50 TTATTTATGG GCGTGGTATT CATCCTTATC GGGATCAATT ATTGGGTAC ATTTT 115

(2) INFORMATION FOR SEQ ID NO: 1409:

(A) LENGTH: 123 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1409:

10 AACCAGATGa AAAGCAAATA TACATATATA ACTCTACATG GGGTCGTGGT TTGGATATTG 60  
 TTCATGATGC ATTCCGTATG CCAATGACAA AGCAATATAA AGATAAATTn CAAGAAGATA 120  
 AAA 123

15

(2) INFORMATION FOR SEQ ID NO: 1410:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 120 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1410:

25

CTnTTTATAT TGAGGATTTT GTATCATATA TGGATAATCA TTAAAGGTGT ATGCTCTTGT 60  
 TATCAGATCG CTACGGGTAA AATCGCTTCT ATAGGGCATT TACATGCGGG CTTCTGCCGG 120

30

(2) INFORMATION FOR SEQ ID NO: 1411:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 455 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1411:

40

TCTCGTATTG CGTTTAGAGA ACATGCGCAC AAAGGACAAA TTCCAGGTGT TAAAAAATCA 60  
 AGTTGGTAAA ATCAAATTTT GTACTTTAGC CCATTTACAA TATCAATAAA ACAATGTACA 120  
 GTATATACGA ATGCTATAAA CTGAATGTTT TCTCATATTA ATAAGGAAAC ATTCCGGTTTT 180  
 45 TAATTTGCAT TAAAAAATAA TTAGTTTTTA AAGGGGCTAT TTAAAGTGAA AATATTTGAT 240  
 TACGAAGATA TTCAATTAAT ACCTAATAAA TGCATAGTTG AAAGTAGGTC TGAATGTGAT 300  
 ACAACTATCC AATTTGGTCC GAAAAAATTC AAGCTACCTG TAGTTCCTGC GnATATGCAA 360  
 50 ACAGTTATGA ATGAGAAATT AGCGAAATGG TTTGCTGAAA ATGATTACTT TTATAATCAT 420  
 GCATCGTTTT GATGAAGAAG CAAGAATACC TnTTA 455

55

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1412:

ACAATGTCAA ATCACAATAG CTGTTGTAGG CATTGTGATTA CAATGAACTA AAGGCAAAAT 60  
 TGGAGCAGTT ATCCATGAAT GATTAATAAC AACAnAAAGT ATGGGGTCAA GTTTAGGG 118

(2) INFORMATION FOR SEQ ID NO: 1413:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 245 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1413:

TGTTGACGAT ATAGGAATTA GCAAGAAATA GGCTAAGATA GTTTCGCACA ACTTGGGGCC 60  
 CAnCCACTTG CTGTGTTTGTGA GAATTAGGGG TCCATTTCTC GTGTTGGGGC CCGAACTAAT 120  
 AGTATGAATA TATATATCTA ATATTAAAC GGCAATATTT ATATGGTATA CATTTTATA 180  
 TTTAGTnTTT GTATAGACAT GCTAATTAGC ACTTTCTAAA AAGGGTTGAA ATGATATACT 240  
 GATGA 245

(2) INFORMATION FOR SEQ ID NO: 1414:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 252 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1414:

TTTTTGTTAT TCAAAATTTA GAGTGTGTTA TATGATAACG GTTTTTTCAT AGCGACTTGA 60  
 TCATTTTTTCG AAATGATGAA AGATATGCAA GTTCAATCAA TCGGAACAAA AATACTATAT 120  
 TATGGTAAGA AnTTCCCGAA GACTAGCGCA CTCACACACA AGTGCATCCT CGCGAACAAT 180  
 GCGCACTTTT CACAAGCACA CAAACACAAG GCACAAGTGC ACGCAnTATT AGACAATGGT 240  
 CTACCTACCA GA 252

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1415:

ATCTGCTGGA AGAGAAAAAA GACGCTCTTA AACTGGCTT TAGAAGGTCA AGATATAGAA 60  
 GnTATTAAAT CTAAAAAAGA AGGAACCTGA AAAAGTGATT CCAGGAATTT TC 112

(2) INFORMATION FOR SEQ ID NO: 1416:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 124 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1416:

CTCAATTACA TTCAAGAAAA TGGGTGGAAT TACACAACGT TGGACTGAGA AGTATAGTTA 60  
 ATAGCGCAAA TGCnATAAGC CTTATATAAA AATGGGCACA ATTATTTTCAT GTACCAACAA 120  
 GAAC 124

(2) INFORMATION FOR SEQ ID NO: 1417:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 121 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1417:

TTCAAGAGCA CATACTGTAA CTCGTACGAG AATTTTTTCA AAATGACGCG TCAATCTCAA 60  
 TATCATCATA TGGTATTCCG AGTAATACCC CTCGnCACCT TTTTtaggTA GCGTCAATAT 120  
 T 121

(2) INFORMATION FOR SEQ ID NO: 1418:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 123 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1418:

CTACGCCATC AAGAGGGTGT TAGTGCTATT AACTATTGCG GCGAGAGCAA TTAGTCGAAT 60  
 5 GCAAATTAGG ACAAGTTGAT GAGTAACTAC nGCCAATATC GGTAAGTTTC ATGGCGGTTT 120  
 AGC 123

(2) INFORMATION FOR SEQ ID NO: 1419:

10

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1419:

CTTATAATCC TTACnGCAAT TTCACCTTGT ACGGAATTAA ACAACGGAGG CATTTACTTA 60  
 20 CCCCTTTAC TTAATACGTA CCAAACTTG GTCGTATTCA ACCATTGGG 109

(2) INFORMATION FOR SEQ ID NO: 1420:

25

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 121 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1420:

GCTGTnGTGC TGCCAAGATG CTGATTGAAA AGTATATATG ATTGCATCAG TAGAAGAGCG 60  
 35 AGCAGAAAGA AGATATAAAG ATAATCAGTT AAGAGGTGTC GAATCAAATT TTGAAGATTT 120  
 A 121

(2) INFORMATION FOR SEQ ID NO: 1421:

40

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 128 base pairs  
 (B) TYPE: nucleic acid  
 45 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1421:

50

TGTTTTTACA GTCACATACA CTAGGCATCC TAGCATTATC TAAATTTAAT ACCATCGCAA 60  
 CTTGCGCTTT AATCTTCAAG GCCAATTAAA CCTCCTTCAT CTTTCTAACT GCTTAnATAT 120

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## (2) INFORMATION FOR SEQ ID NO: 1422:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 110 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1422:

GCCAATCATT GTCAATGTTT AGGCATCAAA TTTATCGAAT GATTTTCATT TGCCATGATC 60

AGTCAAGGCG GGGATTTATT CAAAAATTAT GACGCCTAGT AAAAAATTTT 110

## (2) INFORMATION FOR SEQ ID NO: 1423:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1423:

ATTACCTTGC ATGAATTTCC ATCTGTCAAA TGTGCGCCTT CACGAATTTG TTCGATAAAG 60

ATACGTGGT CACCGTGAAT AATTTACCA GCTGCATTTn TCCATGGACC A 111

## (2) INFORMATION FOR SEQ ID NO: 1424:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1424:

TGTTGTGTGA TTGCGTATTC TCAGGTGAAT TCTTACATAT ATAGTACTTT TTGTTTCCGC 60

TTGATTTGAC CTGTCATATC TTTCACATTC TTCGAAAATT GATCAAAGCn CTATTGAAAA 120

ACCGTATCAT ATACAnACCT CTAATTTTTT TGAATAACAA AAAGAATTCT TTGACGTATC 180

AACTATATCA TCATGACTTC 200

## (2) INFORMATION FOR SEQ ID NO: 1425:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1425:

5 TTTCTATAAT TTTAGACTAT TTCTACCATG TTGCTGAACA ATTTACTTAG ATAAAAATTA 60  
TnAAATTTTG GTCAATTAAC AAAGTTAGTT TGTTAAAACG TATACTTTAA TTATTCCGG 119

(2) INFORMATION FOR SEQ ID NO: 1426:

10 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 116 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1426:

20 AAAATGGCGT TGCATTTTAC TCTAATAACG CTCAAGGCGA CGGCAAAGAT AAAGTAAAGG 60  
CACCTATTAT CGAACATAGT ACTCCTAnCG GACCTGGAAT TTAAATCAGA GCGGCC 116

(2) INFORMATION FOR SEQ ID NO: 1427:

25 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 212 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1427:

35 TTTTATTTAC GTATAAGTGG GCGTTAGGTG TCACAGCGGT TGTCGATCAA AATATCATCA 60  
TCAATCTTGT ATATGGGTTT GCGGATTCTT ATTTTATGAT TTTACAGAAC TATCCTAGGC 120  
TTATTCTTTA TTAAAAGATG CAACnAGTTA TATAAAAAGA CGAATCTATC AACGCGAGCT 180  
GCTCACAAGG CATCTCnTAT AGCGTCCACA TC 212

(2) INFORMATION FOR SEQ ID NO: 1428:

45 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 265 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1428:

GAAAAATTGG TTCTGAATAT AATGGTGCCG TATACTTTAC GCCTCAAATC AAAGATTTTA 60

55

ATTTTAATGA AAAACATCGG TCGAATATAA CATAAAAAAA CGTCTATATC AAAAGCATCA 180  
 TGAATAAACA GAGGAGCACA AAAATGAnTA AAAATATAAT CATCAAAAGT ATTGCGGCAT 240  
 5 TGACGnTTTT AACATCAATA ACTGG 265

(2) INFORMATION FOR SEQ ID NO: 1429:

10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 145 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1429:

CGTACGAAGG ATTTGCAAAC TTCTTCATTC AACAAAGCTAA AGAAGAACGT TTCCATGGAC 60  
 20 AAAAGATTTA TAACTATATT AACGACAGAG GTGCACATGC AGAATTCAGA GCAGTTTCAG 120  
 CACCAAAAAT TGACTTTTCA AGCAT 145

(2) INFORMATION FOR SEQ ID NO: 1430:

25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1430:

35 ACACCGCTAA GCGTATTAAG ACAGGATCTG AAAATGGACA CATCGCAATC GAATTATTGC 60  
 AATGCCAAGT CATATCGGGG GTGAACCGCA ATTTCAGGnA TTAAGTGGAT AGGTA 115

(2) INFORMATION FOR SEQ ID NO: 1431:

40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 211 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1431:

50 nATGTATTnG TGAAAAGGTC CTGAGTGGAC AAAAGACCTA AATATTTAAT GGTCGATTAT 60  
 CGCACGTCCA TAGTTGGTGA ACAGGAACTT ACACGTACAT CTAATCGCAG ACTATGCGTA 120  
 AACTTTGGAA ACTGCTAGTC ATTGAAGCGT GGTATGTGTA TGCACGTAAA TATGCATTAG 180

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## (2) INFORMATION FOR SEQ ID NO: 1432:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1432:

GGAATGATTG ATAAATTGGA CTA CT TAAAG ATTTCCGTAT CGTGTCA TTT GGCTCAGTCC 60  
ATGTTTAATC ACCTATGnTG ACATGGTATG ATATTAGTGA CTACCAGAGA TATGGATGAT 120  
TTGGAACGTG GAGGACTTGA TCGTT 145

## (2) INFORMATION FOR SEQ ID NO: 1433:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 169 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1433:

TTTATTGCAT TTACATAATA ATATCCTTTT GTTGT TTTGG TATTTCTATT CATATACAAG 60  
ACCATACCTT TAACTTTCAG AGCTTCCCCC TTATTTTGAG TTGCCATTTC AGAACCAATA 120  
ATCCATGTAC CTTTATCATT TTTATCAAAT TCGTCATCAC GATAACCTn 169

## (2) INFORMATION FOR SEQ ID NO: 1434:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1434:

GATCTATAGT TCTGTAATCT GACGTGCTTT GCCATGTGCA CCACTCGTCn TAAAAATCAC 60  
TTACACTTAA CCCTTTTCCA CCTTTATCGT ATCCACCTTC AA 102

## (2) INFORMATION FOR SEQ ID NO: 1435:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 116 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1435:

5 TTCTTATTAT ACAAATAGAA GCCATGTGTG CTTATATCGC AGCATCATGA CTCCTTTTTC 60  
 ATTTGAATAT ATAAATAATA CAGnCGCTTT CGAATAAATT TAGGCTAATT CTACCA 116

(2) INFORMATION FOR SEQ ID NO: 1436:

10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 144 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1436:

GGGGGTTTAT GTACTGGTGG ATCTGCAAAC TACTTGGCGT AAAGAATATA CAGATATGGT 60  
 20 AAnGAAAAGT TTAGATTAC ACGCCATCAC AATGGATTAG AAAAACCGAA TTTCTTCAGC 120  
 AATTCTACAA TTTCTAGTAT ACGC 144

(2) INFORMATION FOR SEQ ID NO: 1437:

25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 101 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1437:

35 GTTGCTGGGn AACCTATGGT CGAACATGTA TTGGTAAAGT GTGAAAGGCT CTGGTGGCGA 60  
 TCAAGTTGGT AACCATCGTA GTACATGGTG CTGTAAATGT A 101

(2) INFORMATION FOR SEQ ID NO: 1438:

40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 321 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1438:

50 AAAGATGGTG ACATTTTCATA TAATCCGAAT GTGCCAAGTT ATTCAGCAAA GTATCAATTA 60  
 AGTAATGATG ACTACAATGT GAAGCAACTT AGAAAGAGGT ATGATATACC AACTAnGAAA 120

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AATTTAGACT TTACATTTAT AGAAAATAAA GAAGAAAACA TCTATTTTAC GGATAGTATT 240  
 AATTTCAAAC CTACTGAATA GGGTTAATAG AAGTTTGAAA TGAAAATTTC nTAAAGTGTG 300  
 5 CAAAATAATT TGTGCTTTA G 321

(2) INFORMATION FOR SEQ ID NO: 1439:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 135 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1439:

CAGTTGTAAT GGGACCTGGG CCAATCGGAT TACTTGTAGC ACAAGTGTTA AAAAGTAAAG 60  
 20 GCGCAACTGT TGTGGGTACT GGGTTGGGAC AATTGACCAA GTCAGATTAG ATTAAAGCCA 120  
 GAAAGCCATT GCCAC 135

(2) INFORMATION FOR SEQ ID NO: 1440:

(i) SEQUENCE CHARACTERISTICS:  
 25 (A) LENGTH: 110 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1440:

AAATTATTTT GAACACTTTA TGAAATTTTT ATTTCAAAC TCTATTAACC CTATTCAGTA 60  
 35 GGTTTGAAAT TAATACTATC AGAAAAATAC ACATTTnCTT CTTTATTCT 110

(2) INFORMATION FOR SEQ ID NO: 1441:

(i) SEQUENCE CHARACTERISTICS:  
 40 (A) LENGTH: 436 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1441:

TCTCTTTTGG ATTCATTAAG ATTGCnGCAT CGATACCAAC GTTmAACGGT GATTGTGTAA 60  
 50 TGAATTTTGG CCACCAAGCT TTTTAAACAT TATTCTTTAA TTCAACACCT AAAGGACCAT 120  
 AATCCCATGT GTTTGATAAA CCACCGTAAA TATCACTACC AGGGAACACA AAACCTCTGT 180

5 GAAAACGCCC CATGGAAAAT AACAGCATAG TAAATATGCT TTAAGTCCAT GGGACGAGTT 300  
 AATATTTTAA ATTGTATATA ATACAAAAnA AGTnACGTAT TTAACCGCG GTTCCACCCA 360  
 AATTAGTGTA GTCACGCT TTTATTTTAA AATGATTCGT TCGGCCAATC TTATTGTTAA 420  
 GCTTACACTA TCCTTA 436

10 (2) INFORMATION FOR SEQ ID NO: 1442:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 461 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1442:  
 20 ATTTTtagAA GCATACTGCG AACGTCATCA CATCGATTTA CATATCAAAA AGTTAGATTT 60  
 GTCGCATAGT CTCGACCGAA ATAACAGCAT TCAGAATGAA GCTCGAATTA AACGTTACGA 120  
 ATGGTTTGAT GAAATGATGA ATGTATTAGA AGCGGATGTA TTGCTAACGG CGCATCATTT 180  
 25 GGACGATCAA TTAGAAACTA TTATGTATCG TATTTTtAnT GGGAAATCAA CACGTAATAA 240  
 ACTAGGATTT GATGAGTTAT CGAAGCGAAA AGGTTATCAG ATTTATCGAC CACTTTTAGC 300  
 TGTCTCTAAA AAAGAAATAr AACAAATCCA AGAGAGATAT CATATTCCAT ATTTTGAAGA 360  
 TGAATCnAAT AAAGATAACA AATATGTTAG AAATGATATT CGTAAnAGAA TTATTCCAGC 420  
 TATTGATGAA AATAATCAAC TTAAAGTATC GCATTtATTA A 461

35 (2) INFORMATION FOR SEQ ID NO: 1443:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 143 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1443:  
 45 AAAGGTGATA AAAAACAAG GCATTGTAAA TTAAGTAAA ACCAAGTGAG TTATTACAG 60  
 ATTCTAATTG GGATAATGCG CGATATTTTA TTCCACACTT GTTACATTAT TGCTTTACGT 120  
 50 GGGGGTTAGC GTGGAnTCAT CAC 143

(2) INFORMATION FOR SEQ ID NO: 1444:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 90 base pairs  
 55

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1444:

10

TGGTGTGGT TCATCAGTTG TAAACGCGAT TGTACAAGA CTTAGAAGTA TATGTACACA 60  
GAAATGAGAC TATATATCAT CAAGCATATA 90

(2) INFORMATION FOR SEQ ID NO: 1445:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 218 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1445:

25

ATTGAACAGT GACAACAAAT GACAACAATG AATGACCAAC TGAGTTGCAG AATTGACCGA 60  
CCTGACTTGC TGThAGATGT GCATTGCCTG TGACCAAGTTA ACTGCTGTTT GTACATTATG 120  
ATTGTGCACG TGAAGTCTTT GCAAATGACT TTTAACATTA TGCTGCTAGA GCCATCTTTT 180  
AAAGATGTTT GGACTAACGT nCATGATGTG AATATCTG 218

30

(2) INFORMATION FOR SEQ ID NO: 1446:

35

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 105 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1446:

TTTGACTTGA CATTATAGAA CACAAATTCA TTTGAACTA TGTTTTCAAA TTTATTTATT 60  
GTTACTGGGA ATTTCACATT ATTAGATTTA TTTATTTTCT TTTGA 105

45

(2) INFORMATION FOR SEQ ID NO: 1447:

50

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 104 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1447:



AGACTGAAAA CTGCATATGC AGAGGCGATG AAACAAAATG CCAT

104

(2) INFORMATION FOR SEQ ID NO: 1448:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 104 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1448:

TTGAATTAAC TGAAGAAATA GCAGTGCAAG CAGGATTGTT GATATGACAA CATTGAGTC

60

AGAATGGCAA CAACAACGTG ATTCGTGCAC TCCAAGCACG TGCA

104

(2) INFORMATION FOR SEQ ID NO: 1449:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 349 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1449:

TATTAATTTT TTTTAATATG GAATATTCAT TGCATCGCTT TCCTATTCTT CAAGCCCACT

60

TTTTATCTTC ATATACATTA ATTAACCACC kTCAAACATT GTCGTTAGAT TCGCCAAATT

120

GAATCTATTT TTAGCACAGC AAAAAACCGA ACTGCTGAAA TAATGCATCT CCAACAGTCC

180

GGTCTATTAA ACTATTTACT TATCTTTATT AAACAATTGA CATGATTTAT TAGAATAACC

240

CAATTGGCAT GACCATGCAT CAGTAACATC CATGTTTAAT GGCTGCTGGT TTTTtaggTA

300

AACCAGGCCA GAGTCATGGn TGGCACCTGn GCAACGChAC GATAAAGCC

349

(2) INFORMATION FOR SEQ ID NO: 1450:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1450:

GATTTTATAT AAATATAGCT TTTCAACAAA ACAAATGATT GAATTTCTAG GAATTGAGTC

60

ATTAAAAAAA CACTTGAAAA ATTCAGGTGG GATTGCGCTA TTGCCGGAAT TTATTGTTGC

120

AGAAACAACA TTGaTAATTA ATCCTGAATC GAATAAGCAm GTACTTGAAT CTTTGTAAA 240  
 AGATGTTTTT TTATAATTAT TGGTGAAAAC GTGTAGTTAT GGTGAAACTC AAAGATAATA 300  
 5 ATTTAAATGA GATGTTAATG AAAAAGTAAT TCAATATAnA ACAGGTGATT TAnATCTTAA 360  
 TAAGGnTAAT TCCAGGTTGA ATTCCAATTG CGGGCATCAT 400

10 (2) INFORMATION FOR SEQ ID NO: 1451:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 124 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1451:

20 TCGGTTATAG TTGCTATTCT CAATTATGTT CGCGATAATT TTAAGTAAAA GTAAGCACAG 60  
 ATATTGAATT TGATAGGAGT TAATTGATAT ATACATACGA ACTTTCATGG ATCACTTAAA 120  
 TTnG 124

25 (2) INFORMATION FOR SEQ ID NO: 1452:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 126 base pairs  
 (B) TYPE: nucleic acid  
 30 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1452:

TGTATTAATA ACCTTCCACC TTTAAAAGCA ACAATGCGGT GTCCTTTAAA TTCAAACATA 60  
 ACCATATACG AATTACTCGA TAATTCTGTG TGTTTAATTG ACAGATGTCG TGTGAATTGA 120  
 40 TnATTT 126

(2) INFORMATION FOR SEQ ID NO: 1453:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 280 base pairs  
 45 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1453:

ACTTTGGCAA CATCTGGAAT ATCATATAAA TCAAGTAACT TACCTAACCG ATGATTAATA 60

55

CTAACAGTTG TTTCCATGCC TACACCTCAC GATATTATCA CTATTCATAT TAACATTATA 180  
 TGTAAGAAAT TAAATCTTT TGAAGCATTAGATTACTTA TCATTThTAA ATTTCAATTT 240  
 5 AACTAACAG TAATTTATGT AGCTTTTGnA ATTCTCATAA 280

(2) INFORMATION FOR SEQ ID NO: 1454:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 242 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1454:

ATATTCTTTA AATTAAACTG ATCACTTGAA TAATTAACAT TACTTAATTC TATGGCATTG 60  
 20 ATGATGATTG CTCCTCATAA ATGAACGTTA AAATATCCTG CAGTTCCTCA AGTGACATTT 120  
 CGATGGCTTG CGCTTCATTA ACCAATTCTT TAACCAAATT TTCAATGGTA AAAAATTGTT 180  
 TCTCTTTTAA AATAGGAACT ATTCTThGCT CCTTAACAAA GGnCCCTTTT CCTCTAATTG 240  
 25 TT . 242

(2) INFORMATION FOR SEQ ID NO: 1455:

(i) SEQUENCE CHARACTERISTICS:  
 30 (A) LENGTH: 110 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1455:

ATAAAATTGC AGACTTAGAT TACTCTTGTT CAGCATTTTT AATGTATATC GGTATAGATA 60  
 40 TTGATGTGAC AGATCAAGTG AGACTTGCAATnTGGTATTT TATTCAGATG 110

(2) INFORMATION FOR SEQ ID NO: 1456:

(i) SEQUENCE CHARACTERISTICS:  
 45 (A) LENGTH: 551 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1456:

ACCAAGTGGTT GCCTTTTAA GTCCCGCGTG GGACAAAAAT TAACCTCTTT ACACTTGCAA 60

55

AAAGCGCTTG CAATATATTT TCGATTGTt ATTCAACmAA ACGTTTTATT tTATTCGCTG 180  
 TAGTCAAATG TATACCCCTTA TACTGACTCG aTAATCATTt GCTTATnATT TGAGAcTAGG 240  
 5 ACATAAAATcA ATGCTCTAGA ATCCAAAAAG TCACATTAGT AGTAGTTAAC CGAACGAAAA 300  
 TGCACCTTGTA ACAAGCTTTT TTCAATTAAA GTCAGGGGCC CCAACATAGA GAATTCGAA 360  
 10 ATGAAATTCT ACAGGCAATG CGAGTTGGGG TGGGACGACG AAATAAATTT TGCAAAAATA 420  
 TCATTTCTGT CCCACCTCAC TCAAAATAAA TTTCACTATC CGTAAAATAA ACAACTAACT 480  
 ATTTAAGTAT CATCTCTCCC CTAATTAACA ATTATAAAAA TAAGAACCAA TATTCGAGAC 540  
 15 AACCTAATTA A 551

## (2) INFORMATION FOR SEQ ID NO: 1457:

(i) SEQUENCE CHARACTERISTICS:  
 20 (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25 . (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1457:

ATCnGGGGCT GCATAAGCGA TATCAAGTGT GAGCATTGAA CGATTcAGGA CTGACCAGCA 60  
 30 CGCCGTTTGC CTGCTTTGAA AGATCCACCG ACAAATCCGC CAACATCGT 109

## (2) INFORMATION FOR SEQ ID NO: 1458:

(i) SEQUENCE CHARACTERISTICS:  
 35 (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1458:

ACCAGAGCCT CTTTGACTTC CTAAGTCGAA TAGCATCGTT GATATAGTTA AAGATGACGC 60  
 45 TAGATTTAGn AATCCAAACT CATAACACCT CCACCATTC ATCACATCTG GA 112

## (2) INFORMATION FOR SEQ ID NO: 1459:

(i) SEQUENCE CHARACTERISTICS:  
 50 (A) LENGTH: 224 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55

CCCCAACCAA TTTTAAATAA AAGGGGGCCT TTGGGGGGGC CAACCAAGGG GGAACCCCTT 60  
 AACCCCAATT TTGGCCAATT TTAAAGGGAA GGCCTTGGA CCTTTTGGG AATGGGCCGG 120  
 5 TTTTAAACCC TTGGTTCCG GAAGGGGAAA ATTTTAAATA AAACCGGAAT TGGTTGCCCC 180  
 CCTTTAAATT AAAAAGTTCC CTAATAAATA AATCCCCCA AGGG 224

(2) INFORMATION FOR SEQ ID NO: 1460:

10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 135 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1460:

20 TTTCGACAAT CAATTCGACG TCAGTGCCAC TCCATCTATA GTAAAGCGTT GATACTTTCA 60  
 ATAATACTG GATCACTGTC TAATTATAAA TGGATTCTTA CATCCCACCA TAATAAATTn 120  
 CATATGTTCA TCACC 135

25 (2) INFORMATION FOR SEQ ID NO: 1461:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 114 base pairs  
 (B) TYPE: nucleic acid  
 30 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1461:

TTATAGAACC TCGTACTCCT nTCGACACTT GAATTTAAAT CAGAGCCGCC AGTGGAGAAG 60  
 CATGAATTGA CTGGTACCAC TCGCAGAAAG TAATGATTCT AAGCCACTTG ATTA 114

40 (2) INFORMATION FOR SEQ ID NO: 1462:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 105 base pairs  
 (B) TYPE: nucleic acid  
 45 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1462:

GTTGAATTGT TGGTGATGTG GTTACACGAA TTTCGAATAA TTGTTCTTTA CGTCAAAACG 60  
 TATCGTTCCA AAGTAATCCC CnGGTAATAG TTACCAACAA GTTCA 105

55

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 162 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1463:

TTGTATGACT CTCGGA CTT TGGTAAAATT GTGAACGCTG GnTGAATGAT TTTTGTTTGA 60  
 CAATTGGCCT TATCATCATT AATCGTATTT TTAAGCTGCT CGGATATAAG TTCTCAGCGA 120  
 GTTCTTTTTTG ATGTATCATT AGTGTAGAAA ATAGCTGTTT GT 162

(2) INFORMATION FOR SEQ ID NO: 1464:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 103 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1464:

TAAATTGGAA AGTCACATTC AAnATGCGAA AATGTTTTAA AATGTCCTGT AGGTGCTTAA 60  
 TAGTTTTGCA TTTGCAAATT TTA CTGAACC GGTTTAAACG AAT 103

(2) INFORMATION FOR SEQ ID NO: 1465:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 153 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1465:

AAATTGTATA ACTACCAAGC TTATATGAAA TGGTAAACAA AATATTATCA CTTGTTTGAT 60  
 AAGTAGCGTG GAAAAATATTG TATCTTTCTA AATGTACACG TTAGAAntCA TGCTTATGTA 120  
 TTACACGCGG GGCAC TGGTA CCTAAGGGCC TAT 153

(2) INFORMATION FOR SEQ ID NO: 1466:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 124 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1466:

TTTCAGTAAC ATATGAAAAC TTAATTAACG ATGTTTCAGTA GGTTCATACA TTTTACTTTA 60  
 5 TGATGCTTAA TTGAATTACA nTTAAGATAT GACCAGCTAA AAAGAGTTAA TGTGATATTT 120  
 AACC 124

## (2) INFORMATION FOR SEQ ID NO: 1467:

10

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1467:

20 AAGGAATTAA GTTTGCGACA CCAGCAAATA GTACTAATAA AGGAATATAT GGTAAGTCAA 60  
 TAATTGAATA ACCGATATAT AAGAATATAC CTAAAATAAC ACTGACAGTT ACTTGACCTT 120  
 GAATGTAAGA TTTTAATGTA AAGTTTAAAT CAGTTAATAA ATCTACGAAA AATACTTTAC 180  
 25 GTTCACCTTT GAnAAATTTA GCAACAGCTG GGATAAATTT TTCATGGTCT TTTAACATAT 240  
 AAATTAAGAA GAATGGAACC ATAATCAATA AGAAGATGGT TGAAATTAAT GATGTAATGT 300  
 ACTGTAATGA ATTAGATAAn ATATTAGnAA CGCCATCACC CATTGATTTA ACCA 354  
 30

## (2) INFORMATION FOR SEQ ID NO: 1468:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs  
 35 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1468:

TGCAAACTAG GAACAATAAT GTTAATATAA CTATGATGnA AGTTAAAAAA TAAAAAGGAA 60  
 CACTCTATAA TATGAATTAG GGTTCACAGT TTTTGTAGTA TTTTACAGTA TCAAAGTTTA 120  
 45

## (2) INFORMATION FOR SEQ ID NO: 1469:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs  
 50 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55

TCTAAATGCT GACTAAAAC AGCAACACGA GACTCATTAT TATTAGACAC GATTGTAATA 60  
 GTGATTCCTT TTTCATTAGC TTCCTTAAAC CATGCTTTAA CACGTTCTGT AGGTTCTTTA 120  
 5 ACATCCCAAC CTACTAGCGT ATTATCTAAA TCTGTAATAA TACCTTTAAC GCCTTTGTCC 180  
 ACTAACTTGT CTAAATCAAT TTGAAATATT GATTGAACAT ATGAATTCGG CATAAAAAAC 240  
 10 TTGCGAACTA AACCCATTTA ACTCACCTTT ACCTTTTAT AATTGAGACA CTAATGCTTC 300  
 AACAGTTTGA CTTGATGATA CAGCTGCTTT TTCTAAAAAT GCTTCGAAGC TCATTTCCGC 360  
 TTCTCCATTT GCTAAGTCTG AAAGTGACG AACTACAACA AATGGTACAT TAAATTGATA 420  
 15 ACATGTTTGT GCAATTGCAG TTGCTTCCAT TTCAACCGCC ATCGCATTTG GAAATG 476

(2) INFORMATION FOR SEQ ID NO: 1470:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 156 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1470:

CACCATACAT GGGTAAGGAT ACTACTCAAA TCAACTTGAA ACCAATAATn CATGACCATA 60  
 TGTGTGCCAA TGAATTCAAT TGGAAGACA ATGATGAGAT ACTATTAAAA CGATTATATT 120  
 30 TATTGTCACT TGTTCAAACG CACTCCTTTT CCAAAT 156

(2) INFORMATION FOR SEQ ID NO: 1471:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1471:

AACAAAAGTT TTGAAAAGCC GGGTGCCAGC GAAAACCTAA AAAGCACTTT ATCAGAAAAA 60  
 45 GCTAAGAAAA AAGATTAATA TTCATTCAAT AAATATAAAT CCAATTTAAT TTGTTGTTTA 120  
 AGGTCTACAA GTGTATGTTT AATATACAAT TCATCGTTTG ACGGTAAATC AGATACTTTG 180  
 AAATCTTGTC GCTCAACCTC TAGTAAATCG AAATCGCTAC CAGCTGAATT ATAGGTTTTA 240  
 50 AGTTCACCTT CTTCAATGAT TCTGTTTCA AAGTCTTTAA TAACTATAAA TACTGGTTTA 300  
 CCGTTGTTAT TAAACAACCT GTCTCTTTTG TCTAATAAGC TTATACAATC CAAATTCATA 360

55



## (2) INFORMATION FOR SEQ ID NO: 1472:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 106 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1472:

CTAGGATTnC ATCTATTTGG GATGAAAATA AGCGTTTCCT GAATCCACAA GAATATCCAG 60  
 TCGATTTAAG CCAGGCATGT TGGGGTAATA ACATAACGTT TTTTGA 106

## (2) INFORMATION FOR SEQ ID NO: 1473:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 117 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1473:

TATCTTACCT ACATTGTTAT CTGATGGCTG TAATCATTAAT ATCTATAACA CCGAGTTCTT 60  
 CCATTAATTT TCAGCTTCAT TCGACTGCCT TTTTATnTTT CGTACTATTA CGAATTT 117

## (2) INFORMATION FOR SEQ ID NO: 1474:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 164 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1474:

ATGCATGGCA CTGGAAnCAG CTGGGAGATA TAGGTAGTAT CCTAAAGAAG TTCAGTTAAT 60  
 CGGAGCGATT GTATTGCATG AAGGTAACAT TGCGGAGTGC CAACAGGCGA AGTAAAACTT 120  
 AACGGCAACC ATGCCTTATA TTAAATGCCC TTCCGGGAAA GGAC 164

## (2) INFORMATION FOR SEQ ID NO: 1475:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 210 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1475:

ACAGCAAGAC GTGACAAATC AGATACTATT AGTCATCAGC GTTAACATGT GGATAnGTGT 60  
 5 GAGGTACGAA TAnCCGAAAG GAAATACGAC CTTTAACATT CGCGCACAAA ATGAGCTCAG 120  
 GCGCCTGCCT TGCCCATT TTAAATTATT TCCCTGGAAA TGATTGCTG TGTGCTGTTC 180  
 10 TGTCCACAAC AACACGATTA ATGCCATGAC 210

## (2) INFORMATION FOR SEQ ID NO: 1476:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 128 base pairs  
 15 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1476:

AGGGTGATTT CACGGTTCGT CTGCCCATTT AATTGCGCAT TTTGCACACC ATCTACCGTT 60  
 TGCAATTTTG GTATTAATTG TTGCATGCAG TACTGTCCGT TGACTTTGnT GCAAGTGCAT 120  
 25 GCTCTTTC 128

## (2) INFORMATION FOR SEQ ID NO: 1477:

## (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 641 base pairs  
 30 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1477:

AAAATCTGGT AAAGTAACTA GAGTTTAATA AATATATTGC ACATAAAAAA TGTGACCTTA 60  
 40 TGTGGAGGAC ACATTTACTT AAGAACTAAG AGCTCAACCT CTTAGTTCTT TTTTGTAC  
 CAAACAATAC ATAATGGTTC ATAGTGAAAT TCGAACTATC AATATAATTT GGTTAATACG 180  
 TTTAATAATG GTTCTCTGTC AAATTGGACT TATGGGTTCA ATATCGATTT TGGCACATAA 240  
 45 ATCAATGTAC TAGGACCTAC AATTTTCCTT TCAATAATAA ATCACGCCAT AATCTTCATT  
 AATTACAGCG TGAITCATCT ATTATTATGT TATAAATkCT ATCTATAAAC GTCACCTTAT 360  
 TAAATAACTC ATGCACTTTA TTA AAAATCC TCACAAATTT GAATATACTT AATTAAATC 420  
 50 TGTACTTCTA ATTTGCAAAA TCAACCCATC ATGTACAGTT ACTTTCGCTT GCAAAGACTC  
 AATTTTCATT GAAATAGTTA AAGTAGAACC TATATnAAGC ATTTGTCTAG CTAAATTATA 540

55

GATAACTCTT ATCTTTTCA ACTGTAGGTG ACCTTTAGGG C

641

(2) INFORMATION FOR SEQ ID NO: 1478:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 121 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1478:

TTAACCGTGA TGCAGAGTAG TAAGTGGATn CATGCTCTGT TATGGATGAC AAGACAAAGC 60  
 AGCGAATATT GCGTACTGCG ATTGATGAGC AGATGCATAT GATTGGATTG GTGCAGCTGT 120  
 C 121

(2) INFORMATION FOR SEQ ID NO: 1479:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 133 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1479:

ACCATTGCTT AGATAAATAC CTCGCAGTGA ACCGCATTAG TATAGCACTT CTAGCTGATC 60  
 GCATCAGTAA AGTATGCTAT TAATGTCTCA GTTTTATCTG TAATGCATGT TTAAGTTAGT 120  
 CATAGCATTa TTn 133

(2) INFORMATION FOR SEQ ID NO: 1480:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 201 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1480:

TTTTGGGGnT TTAAATTTT AAATTCCTGn TGGGGGAAAT TCCCTTAAAA ATTCCCAACC 60  
 CTTTAAAGGG GTGGGGGTTT TTTAGGGAA AAAGGGGCCC GGGGTTAATG GTTCCCAAAA 120  
 AATTGGGGAA AATGGCCCC CAAATTTTAA ATTCCCGTT TAAAATTGG GGTGGGTAA 180  
 ATTGAAAAA CCCCCAAATT T 201

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1481:

CAGTATCAAG CATAGTAAAA AATGAGGGTA GGACTGAAAA TACGGCGTTA TTGGTGCTGC 60  
 ATTCACGGTA AATATGTTGC ATGACCAGCA AGTTTTGGnC TTCTGATGCA CC 112

(2) INFORMATION FOR SEQ ID NO: 1482:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 127 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1482:

CAAAAAACAA GTTCTGATAT GCAGTAGCTG AATAATTTTG CTAGTTACAC CAnAGTGATC 60  
 TTCTGGTGTT TTA CTTTTTA TAAATGTTTT CATATATTTT ATATGTATAA AAATGGGATT 120  
 TAGCGTA 127

(2) INFORMATION FOR SEQ ID NO: 1483:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 83 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1483:

AGTGGTGTAT TGGGTGAGTA ATGCTTAACT TCATACCTGG TGCATTGGCT GTTCAGTATC 60  
 ATTATATCTG CATGGGCGAT ACT 83

(2) INFORMATION FOR SEQ ID NO: 1484:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 201 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

TATTATTGAT GTTCTTTGGT TCATTCTTTG GTAATAATTT TGCACCTGAA AATTTACAAC 60  
 CGTTAGCTGG AACCTAGnCA AAGGGATGGG TTAGTGCTC TATTGTGGGT TTATTGGTAT 120  
 5 TCCGTGGGCC ACCCCATGGG GCCATTATGG TTTGGGAATT TTGGGAATAA ATTAATTTnC 180  
 CCAACCAAAA ACCAGGCCAA G 201

(2) INFORMATION FOR SEQ ID NO: 1485:

10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 210 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1485:

20 CTCACAGCAA CATCAAAGAG GCAGATATTA GTCAAGTTCA ACGTAATAAC ATCTACCTTC 60  
 ACAAGTCGAT AAAGGAGCAC CATCATTAAT AAGTAGATCA ACAAGTCAAC GAGAATTTTA 120  
 ATGTGCAGAA TAGAGAAGTA CACCACACAn ATAATCAAGC GATGTAATTA CTACTACATT 180  
 25 TnCATGACA GAGTGAACCT CAACAGCGGT 210

(2) INFORMATION FOR SEQ ID NO: 1486:

30 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 158 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1486:

CAGGTTATGT TTGCATTAGA AGTTCTTGGA AAATCTTTAT GGAACGTGGT TTACACCCTG 60  
 40 ACTTTGAATT GCATCGATCT GATGAAGATA AATGAAATTG AATGGGATGG CnACATGGA 120  
 ATGCAACCTA TGACTTGGAT GGAATTAGAT GAAGCGGG 158

(2) INFORMATION FOR SEQ ID NO: 1487:

45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 114 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1487:

55

TTGCAGCATA TAGAGGTAGA GGCATCGCGA CAAAGTTATT AACGTCATTA CTTG

114

(2) INFORMATION FOR SEQ ID NO: 1488:

5

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 108 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1488:

15

TGCTAAGTGA TAAAAAGAAT GATAAGCCAG GTGTACCAAT GGGTCCTGGA TTAGACCATT

60

TGGGAGATAT CGTTGTACCA CATGTTGATC AACTAACGTT nCCACATG

108

(2) INFORMATION FOR SEQ ID NO: 1489:

20

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1489:

30

CAAnACGTAA TTTCATGATG AAAGTGGTCG ATAATTCTT GAAACATCGC TTTCAGTAAT

60

AACGCCTGCT TTAAGGTCAC GTCCGCATA GGTGTACTGA GGATGTTGAT GT

112

(2) INFORMATION FOR SEQ ID NO: 1490:

35

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 265 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1490:

45

CAGAACGTTT AAAACAAAGT TGGAAAAGTT TTCTAATCGT ATTAGCTGCA TGTTTAATAC

60

TTATTATTGC AAGTGAAACG CTTATTTTCC TTTAGTCATT TGACCGATGT TAAAGAGGTG

120

AGATGGTTAT TTAGAATCAT TGTATTGATT GTTTTTCGG TAGTGATGTT CACAATTTAT

180

50

ATCTCTTATC ATCATTATAT GAATGACTTT TTAGTTACTA AGTTATTTAA TATTTCCGCA

240

GCGACGCCAt AGTTATTATG TCTAT

265

(2) INFORMATION FOR SEQ ID NO: 1491:

55

(A) LENGTH: 113 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1491:

10 CnAAATTGGC CAGGGGCTCA TCCAATATTA AAATAGGCGT ACGAGGGATT AATAGACCAC 60  
CTAATGAAAC GCGTTGGTTG TTGGACCTCC AGATAAATCC TGGGGGTCGG TGG 113

(2) INFORMATION FOR SEQ ID NO: 1492:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 276 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1492:

25 ACTAAGAAAA TCCGAAATCT TTTCCGCTTC TTTTAAATAC GTAATACTTC CTTTTTTTCG 60  
CTCTAAATGT TTGGCATTCA ACTCATAACT ATTCATTAGT TTCGTTAAGC CTTCTGCATG 120  
ACTCTCATT TTAGAAAAA TTTCCAAATG GTACGAAGAT GTTTCAGGGT TATTCACCTGA 180  
30 GCCACCTGCC AGAAAAGCTC CTCTCAAGTA ACTGCGTCTC ATTTTCGTCAT CTTGAATCAT 240  
TGAAATGATC AATTTTCATGG CGnnAAAATG CCGTCT 276

(2) INFORMATION FOR SEQ ID NO: 1493:

35

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1494:

5 AAAAAAAGG TTTTACCC GGAATTCCAA AnTTTAAATC CCTTAAAAA AATTCCGGCC 60  
 AACCCCCAAA CCCAAGGTTT TTTCCTTAAC CTGGAAnTA ACCAAGGTTT TTTTCCAAA 120  
 AAATTTTCCA AAAAAGGAAT TACCCAAACC CTAAAGGTT TAAAAATTGG GGGGGGAAAA 180  
 10 AGGCCCTTTT AGGGGGGGAA 200

## (2) INFORMATION FOR SEQ ID NO: 1495:

## (i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 253 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1495:

20 AAAAAATTTG GTGCATTTAT CATATGGAGT ATTAATCTGT AGAAGTAAAG GCGATATAAA 60  
 TGTACTTTG GTAATAAAGA TTACAGCGAA CGTTATTATT GCTCAGGTCA GATCAAGAAA 120  
 25 TTGGTGTCCG GGTGACAAGA CTGGTGGCG CGGTGTAGTT TGTCAGTTGT GTGGTCATCT 180  
 TAAATAACGC TATCGTACGG TGTGTATCAC ATGAAGGGAC TCTTACTAAT TCTGCAAGTA 240  
 30 CACGTCACGC nnT 253

## (2) INFORMATION FOR SEQ ID NO: 1496:

## (i) SEQUENCE CHARACTERISTICS:

35 (A) LENGTH: 104 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1496:

40 ACGCTAGCTT CTGAAAAAAT AAGTGAAC TA TGGATGCAAT GAnCCTATTC CTGAATGATA 60  
 45 TTAGACGTAG CGCACCTGGT GCAGAACGCC AATAAAAAGA CAAG 104

## (2) INFORMATION FOR SEQ ID NO: 1497:

## (i) SEQUENCE CHARACTERISTICS:

50 (A) LENGTH: 100 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55



AGGGAGGCGC CCAAATGGCT CTATATTAAA AAAGGACTCT CAGAGCATT A TGAAAAGTT 60  
 GAAGCTCAAA AGGAAnCGAA AGAAACAAGT ATCAAAACAT 100

5

(2) INFORMATION FOR SEQ ID NO: 1498:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 101 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1498:

TGGAAC TTG GGAAGTCAA ACGGTGTAA TCGTTGAACA TAAAGTTAAA CACATTCTGG 60  
 ATCATGTCGA nCGCGTCCAT TTGATGGATA TAACGGGAAT A 101

20

(2) INFORMATION FOR SEQ ID NO: 1499:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 127 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1499:

AGTTCTGGTG CATCGTTTTT CATTGTATTT GTGACGATTA TCATTCCAGC ATTAGAATAT 60  
 TATGCATTAT ATTTAGGTGT GATAGGTGCA TTTATAGGTG GTTTAACTGT TTATACACTT 120  
 TCAGGTG 127

35

(2) INFORMATION FOR SEQ ID NO: 1500:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 560 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1500:

TCCCCGCTTT AATACCTTCC ACGATTCTT TAATTGCTTG CGGTTGGTCA CCTTGAGGCT 60  
 CAAAATCAGA ATGTATTTTA AAAGGATAAT GTTCAACCAT TGTCACATAT GCCTCCTCTT 120  
 TCAACGTATT ATTTATATTT CCGCTCAACT CTTTGCTTTC TCATnACATA TnTTAGCAAA 180  
 GTAGTCACAC AAAAaGCAAA CGTTkGTTTC TAAAAATGTC GAACAAaGAA AnACAAACAT 240

55

AAATACACAT TATATTAATC ATCATTTTGT TTCAACAAAT TTGTTTGAAA CATTATTTTA 360  
 AAGTTAATCT TAGCGATCTT CATCTTGATG TTTATGAAAT TCGAGTTGAT CTATAATTAA 420  
 5 ATAACCAGCT AATAATGACA CTACATCAAT AAAAATAATC CACTCGTTAT GGAAATACTC 480  
 TTTATAGATT GAGGCACCAA TTAAAATTAA TGTCAGAATA GTACCGACCC ATTTACTTCT 540  
 10 TGTATTACA CTAAATAATA 560

## (2) INFORMATION FOR SEQ ID NO: 1501:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 102 base pairs  
 15 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1501:

ATTAAATCAT ACTnACAATT ACCGATGACA TTATTCCAAT TCAATCTAAT TCCGTGATGA 60  
 25 AAGAGCCACG TTTTGTTTAC TTCGTGGGCG TGAATTATTA TG 102

## (2) INFORMATION FOR SEQ ID NO: 1502:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 30 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1502:

TATGGTAGCT CCAAATGGTT GTATCGTCAC ACCATCATCT TCAAGTGCAA TGCGATGTAA 60  
 TCGATTGGCT GTTGTCTCTG TTACCCATAG TACTTTTTCA TCTGTACTTA AAGCAATACC 120  
 40 ATTTGCTACG CTAATATTTT GAATGATAGG CGTCACTGTT CTAAAGTCCG GCGAAACATA 180  
 ATAAACGCCT CCTAGTGGAT TGGTAGAGTA TCCTCTAAAA TCTGTAAAAT AAAATCCACC 240  
 TTTAGAATCA AATACCATGT CATCAATACA ATATGCTGTT GAAAGATCTT CAATAATATC 300  
 45 TTGTAAGTTG TCACCATTTT CTGTAGCTGC AAAAATGCCT CChGGAGATT TAAAATCTCC 360  
 nAAAATAACC AACGnATAAA TCGGGCAnCT TATGGAATTG 400

## (2) INFORMATION FOR SEQ ID NO: 1503:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 168 base pairs  
 55 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1503:

5 TACAGGTAGT TAACAGTTGA TGTTAAATGG CGTACTGGAT TCTTTACGCA CGATTTTTTG 60  
TTAATAAGTA TGGGATAGCA CATTACTATA TCCTACTTAC GACTTATTGG ATATGTCnTA 120  
GCTATTCTTA AGCTCGAAAA GTTTCACAGG ATACATAAGG GACCAACT 168

10 (2) INFORMATION FOR SEQ ID NO: 1504:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 237 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1504:

20 CTA CTACTGATTG TGTAATGTCG TTGGTAGGCT TGGGCTGTAC GCAGTATTAG GTGTAGGCAA 60  
CTTGGCTTTT GGCATCTACC TTGTATGTGT CGTGTATCTA nGGCTGGGGC TTGCTCCTTC 120  
25 AGTTGTTAGA CAGTAGGGGG TAATCTCAGG GGTGCAATGT ACTCCCTCCG TCCTAAAATA 180  
CTnTATATGC TCGTGCCGAA TTCCTGCAGC CCGGGGGATC CACTAGTTCT AGAGCGG 237

(2) INFORMATION FOR SEQ ID NO: 1505:

30 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 209 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1505:

CGCATTTACC ACCATATGAT GGATCCAnCG ACGTTTTAAT AAAGATAAAA GTGACAGTAG 60  
40 CGGGAAAACA GGnCCATAAT TCACATCTCT TTTGAAAAAT ATGTTCAAGC TAGGATCATT 120  
AGGAGAGTCA TATTAATAAT AAAAATGTTG CAATCAATCG ACGTGCGTTG AATCTTAAAT 180  
45 ACATAATAAA TGTGTAGAA GATATGGGT 209

(2) INFORMATION FOR SEQ ID NO: 1506:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 121 base pairs  
50 (B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1506:

AAAATGTGGC TATTGATTTT GACTTGGAAC TTTTGAACA TTTCTCTCAA GGATTAAAT 60

5 GTAGGTAACA GGCAGGTAC TACGGTACTT ncCTATTTT TTATGCAAAT TTAAAAAAC 120

A 121

(2) INFORMATION FOR SEQ ID NO: 1507:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 144 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1507:

20 AATGACAAGG TCAGCATTAA AACCATTAA AAATAACGC GTTATGGTTA CTGGACGTAT 60

ACAACGTGTT TTGTTTAAAA ATTATTTAGA TAGACATAGC ACATTAAAGC CGAATGTAAG 120

GATATTATTA AAAGAnGTAT TTGT 144

25 (2) INFORMATION FOR SEQ ID NO: 1508:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 139 base pairs

(B) TYPE: nucleic acid

30 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1508:

35 CCGATTGAAT CTGTGTACAC TTCACCAAAG ATATCTTTCT TCGTTTCTTC AGATAAACTT 60

TCCATTGCTT TCTTATCAAC ACTTGTTTCT ACTAATAAGT GTGTTAATT GTGCTTnTTA 120

40 ACAAACTCAA TAGCTTGTC 139

(2) INFORMATION FOR SEQ ID NO: 1509:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 155 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

45 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1509:

TCTGCCTGCC TCGGCCTCCC AAAGTGCTGG CATTACAGGC ATGAGCCACC ATGCCTGGCT 60

55

CAAGTTAAAA TACAGATGTA AGACTTGACT TGATC

155

(2) INFORMATION FOR SEQ ID NO: 1510:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 87 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1510:

ATCCCAATGC TAATGAATTT GCATATACGA TAAATAATGC TTTTATCAT CAATAAAGCT  
 ATGAATCTTT CAAGATCTTC ATTGAAC

60

87

(2) INFORMATION FOR SEQ ID NO: 1511:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 217 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1511:

ATAGGCGTTT ACCAGTTATT TTCGAATCCA TATAATTATG TTTGTCCGTT TGGTTTAATC  
 CAATTAATTG ATTAAGTTTT TCCAATTCCT TTTTTTTTAA TTAAATTC AATCCTTAAA  
 AAAAATTGGA AAAAAGCCTT AAAAAAATT GGTTAATTTT CCAAGGGAA TTAAAAATTT  
 TGGGGTTTTT TnAGGnCCCT TTTGGGAAAA ACCCAAC

60

120

180

217

(2) INFORMATION FOR SEQ ID NO: 1512:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 101 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1512:

TGACATTGCA TCGGATTATG TTACATCAnG GACAACGGGC CTCAAAAAGC GGTGCACAAA  
 CGTTCCGTAA TCATATGCCA GTGCAATCGG ATGTAAAGAG A

60

101

(2) INFORMATION FOR SEQ ID NO: 1513:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 114 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1513:

GATTTTATTG AAATGATTTT ACCTGTGATC AATTATTGTA ACAAATCTAC AATAAAATTG 60

10 TCTTACTGCA TGACCTAATA AnATAGCAAC AGATATCATA CACACTTGTA ATTT 114

(2) INFORMATION FOR SEQ ID NO: 1514:

(i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 77 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1514:

ACATATACAG GTACGTGTTT AGTCCGTCGT ATACTGCAAA ATTATGTCCG ATGAAATTAG 60

25 GGGAAAATTG TAGAACG 77

(2) INFORMATION FOR SEQ ID NO: 1515:

(i) SEQUENCE CHARACTERISTICS:

30 (A) LENGTH: 102 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1515:

CCTTATAAAG TTAATGCAAG CAACATGGAC AAATTATTAn TTGAATAAAC TGCAAGAAAG 60

40 ACAACAATCA TTCTTCGGAA TGCTAGGAGA ATATATTTTA GA 102

(2) INFORMATION FOR SEQ ID NO: 1516:

(i) SEQUENCE CHARACTERISTICS:

45 (A) LENGTH: 89 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1516:

CAATTTTAAA TAGGATTTTT AAGACCTTGG TTGGGTTTTG GTACAATTAA TGGGGACATG 60

55 ACTAGGTCTT GCCACGTTTA TATGCATCT 89

## EP 0 786 519 A2

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1517:

GTAAGAGTGC ATAGTTTTTA AATGTTGCTT GTCTGGTnTC ATTTTGGCAC CATACAGTTC 60  
GTACCTGGAT TAGGGAAATG CCAAATGTCC GCGTAGTGAT AT 102

## (2) INFORMATION FOR SEQ ID NO: 1518:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 448 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1518:

GAGAACTCCT TACCACAATC AAAAGTAATT GATTTAAATA TATGAGAAGA TAAAATGAAA 60  
AGGTGCAAGC AGTATTAAGA ATTTAGGTAG CAAGAAAACA AGAAGTGGTA CATACGATGC 120  
TAACCTAAAA AGAATTGGAG ATTAAAATGA TTATTAACCT TGAAACACAA CAAATACATT 180  
TTGATTTAGA ACATGAAATT CCCTATTTTC AAGCACCTGA GAAAAATAGG ATACGCTTAG 240  
ATATTGATGT TCTCAATAAA AAGCnAATTT CTAATATTAT TAATGTTATA TTTAATAACC 300  
AATCAAAGAC GAAATGTACA TTTTGTCTG AATACTTATA TCCTGTTAAA TTTAGAGAAA 360  
AAACAAGAAT TGGTCGTTTT TTTAATATTA CTAAC TGGA CGAAGAAATC CATTCTACCG 420  
ATGAGAAGTA TGnATTGCA ACTATTAA 448

## (2) INFORMATION FOR SEQ ID NO: 1519:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1519:

ATGGACGAAA GAAGATGTCA TTGCTTTTGA AAACCTAACA AATATTAAAG TAAATTTAAA 60  
AGGTAGCGGT TTTGTGTCCC ACCAATCAAT TAGTAAGGGA CAAAACTTA CTGAAAAAGA 120

ATTCAAATTC AGATGGTnAA GAAGAAATCT GACAGTTAAA ACTGACAGGG ATAAGTCGGG 240  
 ACTnAACAGG AATGGGCTAC nTTTAAATTT AGGGATGGTA TTGGGCCACT ATTTGGTTTT 300  
 5 TGAC 304

(2) INFORMATION FOR SEQ ID NO: 1520:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 322 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1520:

ATGACGTCGC ATGCACGCGT AcGTAAGCTT GGaTCCTCTA GAGCGGCCGC CCTTTTTTTT 60  
 20 TTTTTTTTTT TTTCTGTGG CCTTGATAA TTTTATTGGA TCAGTAACAA CTTTTTGTGT 120  
 TTCAACTAAG ATAGCTAAAA TTCTAACACT TATATGTAAA AATTACACTC CATTTTAGCA 180  
 CAAATGTTAA CAGAAATTAA CAGCACAGTG CCATGAAGAA ATGAnAAATA CACAGCTTTG 240  
 25 GTAGGGnAAT GGTCTCTGGAA ATAATGTAAT GCCAAGTnTC TGATCATTTA ACATATCACT 300  
 CACCTCCTTC TTCATCTGAT GT 322

(2) INFORMATION FOR SEQ ID NO: 1521:

(i) SEQUENCE CHARACTERISTICS:  
 30 (A) LENGTH: 105 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1521:

TAAATACAAA CCCTTTAAAC ATATTTACTA AGTCGTTCAA TTGTTGATTT GATAAnTGAT 60  
 40 GTGATGTGGT ATTTTGCATC GGTCTGCTT GATTCCAGAC ATGTC 105

(2) INFORMATION FOR SEQ ID NO: 1522:

(i) SEQUENCE CHARACTERISTICS:  
 45 (A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1522:



GATCGTATTT CCCAGATGTA AATTCnGTGG ACAATTGGCG TCAAATAGCT TCTAGTGG 118

(2) INFORMATION FOR SEQ ID NO: 1523:

5

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 157 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1523:

15

CnGCATATAA TCCCGCGACA TGTCTTTTAC GGGTGCACCT GTAATATTAT TACCCCCCGT 60

ATAACCCATG TATATCTATA CTTTACCACA TAAATAATT CCGGGACTAT TTGGCACATG 120

TTTGGGTGA ATTTCTTTAG TGGCACACCA CCCCTGG 157

20

(2) INFORMATION FOR SEQ ID NO: 1524:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 82 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1524:

30

ACTGAGGTAG GTTATGTAGG ACGAGATGTT GAAAGTATGG TTAGACATCT TGTGATCCT 60

TGAGTAAGAT TAGTCAAGGC CG 82

35

(2) INFORMATION FOR SEQ ID NO: 1525:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1525:

45

GATACAAAAA AGAAGTTCAA TTTGAACTAT GAAGAAATTT ATATTTTAAA TCATATTTTA 60

AGAAGTGAGT CTAACGnAAT CTCATCTAAA GAGATTGCTA AGTGCTCAGA GTTCAAACCT 120

TACTATTTAA CTAAAGCTTT ACAAAGCTA AAAGATTTAA AATTGTTATC AAAGAAAAGA 180

50

AGTTTACAAG ACGAAAGAAC AGTTATTGTT TATGTTACAG ATACACAAAA AGCAAATATT 240

CAAAAAGTGA TTTGAGAATT AGAAGAATAC ATTAATAAATT AAATCAAGGT TAATTGCGTT 300

55

AAAATTAACT TAAAATTTAA ATATTGAAGA GCTTAATTAA

400

(2) INFORMATION FOR SEQ ID NO: 1526:

5

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 125 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1526:

15

ACTGTCTAAT ATTCACCTCCC TTAAAGTGTT TTTTCATATTT TTCTATTAAT GTTCATATTG

60

TAGGGTGTTG AATGCATCTA AGCATTTCAA GTTATTCTCC AAGTTCATCA ATTTCAAAAT

120

GGAAC

125

20

(2) INFORMATION FOR SEQ ID NO: 1527:

25

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1527:

30

CATGTTTATT TATGTTTCGG CTTTAATGTT GAAGAGTTTT ACAAAGTTTA CCGATTGCAT

60

TTTATAATTT TAATGCATTA TTGGAGCATT GGCTATCATC TATTACTGCG nA

112

35

(2) INFORMATION FOR SEQ ID NO: 1528:

40

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1528:

45

GCGAAGATGA GGATGAGATG ACTAAAGGAA AATATTGAAA AACAACCAAA AAAGTATGA

60

ACATTATTAA AAATTTACAA AATCAAATCG ACAACTTGAG CGCAAGAACn AACAG

115

50

(2) INFORMATION FOR SEQ ID NO: 1529:

55

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1529:

```

5  ATGGATCTTC CGCTTCTCTT AATTGATCAA TTAAATCAGA CATTCATGT TTTTGTAAT      60
   AATGATTCGC TTTAATGGAT TTTTACATG ACATCATGAT TGCTACATCT TCACGTAATT      120
10  TTTTGATATC TACTTTTTTC TCTTCCAAAA TTAGCTCAAT CATATCTTTA ATAATTTCTT      180
   CTACTTCATC TTTAGGGAAC CAAACTGGAT AGCTACTTAC AATATAATCA TGACCACCAA      240
   AATGTTCTAA CATGATACCT ACTTGTTGAA GTCATTTTTT ATATTGATCA ATGACTAATT      300
15  GTTCATCTTT TGAAAAATGA AATGTTAACG GGATTAATAA ATCTTGACT TCATTGGTAA      360
   CCTCACCTAT TtATCTCGA AAATATTCAT AtnTTATnCT      400

```

(2) INFORMATION FOR SEQ ID NO: 1530:

```

20  (i) SEQUENCE CHARACTERISTICS:
      (A) LENGTH: 97 base pairs
      (B) TYPE: nucleic acid
      (C) STRANDEDNESS: double
      (D) TOPOLOGY: linear
25

```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1530:

```

   TAACAGTCAA CCCACCCATT AATATATATT CAACGGCTGA CTGATACGAC GAACGTCAAA      60
30  GAATATGAGA GGAATAGGGA CAAGATCATC ACACATA      97

```

(2) INFORMATION FOR SEQ ID NO: 1531:

```

35  (i) SEQUENCE CHARACTERISTICS:
      (A) LENGTH: 150 base pairs
      (B) TYPE: nucleic acid
      (C) STRANDEDNESS: double
      (D) TOPOLOGY: linear
40

```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1531:

```

   TCATAACGGT GCAACTTAGA GCTGACGTAT AGTTCATTC AACTATATAC GATGTATCAA      60
45  CACCATGTTT CAGTTTTAGG TTAACGATAC TGTATACCGT ATTATGTCAG nGGCACCTTA      120
   TCTTCACGTA CTTTACGGCG AGATGATGAC      150

```

(2) INFORMATION FOR SEQ ID NO: 1532:

```

50  (i) SEQUENCE CHARACTERISTICS:
      (A) LENGTH: 138 base pairs
      (B) TYPE: nucleic acid
      (C) STRANDEDNESS: double
55

```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1532:

5 ATTCATTCTG CTAACCAGTA AGGCAACCCC GCCAGCCTAG CCGGGTCCTC AACGACAGGA 60  
 GCACGATCAT GCGCACCCGT GGCCAGGACC CAACGCTGCC CGrCCTATCC TGAAGCCAAA 120  
 GGAAATGAGA TCGGAATT 138

10 (2) INFORMATION FOR SEQ ID NO: 1533:

(i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 460 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1533:

GGGGnCCnGG CAATGGAGGC GTGCTTGGAT GGTGCTTGGA ATCATCCCTT TGGCCTCGAT 60  
 CATAAGCTTA AACTTTTGGT GCTGGnGCCA CTGGAGGGAA ATCTTCAATT CTGGCAAATG 120  
 25 GTAATTnCTT ATACCAACAT TTAAGGCATG TGGAATGCT GGCTACTCCC GCTTCGTTAT 180  
 CAGCTACATG ACAAATACAG ATGCCATCAC CTTTGCCTCC ATTTTAATCG TTGATGCTTG 240  
 GAAATGTTTT TTGTAAATAT CAATGTTATC CTTGCTGTA TGTATCGCAT TTATATCTGG 300  
 30 TAGCAAAAAT GTTCCAACAG AAAGCCCTAT ACCTAGTTTCG GCAGCTATTT TGGCAGATGT 360  
 TGCCTACTA CTTAATAACC ACATTTCTGG AAAATGATCA TGTGTGGTGC ACTACGATCG 420  
 ACTTGTTTAT CTTTATTGTT AGATAATACG GAATACGnAA 460

35 (2) INFORMATION FOR SEQ ID NO: 1534:

(i) SEQUENCE CHARACTERISTICS:

40 (A) LENGTH: 145 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1534:

TACGCTAATA AATAGTTCAC TTTTCATTT TGTGTAGTCA GTCATTGTA TTCTTCAATT 60  
 TGCTCTTCAT TTAATGCCGC ATAAGCTTGA TCAATAATAT TTGGATTAAG TTGTCCAATA 120  
 50 TACTCTAACT GGTCTGATA AACAn 145

(2) INFORMATION FOR SEQ ID NO: 1535:

55

(A) LENGTH: 151 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1535:

10 ACGCGATTTA ATCGTTCGTT CCAACGATGT CCACTCCCCT ACTAATAATT AAAATCATTAA 60  
 CAAATTATTT CAAACTTTAC AATThAAACT AACAGTTTTTC TCAATAAAAT GCAAGCTTTT 120  
 CTCATTTGTT ATTTAGAATG ATTATGATTT A 151

15

(2) INFORMATION FOR SEQ ID NO: 1536:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 86 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1536:

25 ATAATAGAAT CATTACAAAT TATTTAGAC TTTACAATTA AGACTAACAG TTTTCTCAAT 60  
 AAAATGCAAG CTTTTCTCAT TGTTAA 86

30

(2) INFORMATION FOR SEQ ID NO: 1537:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1537:

40 ACCAACTGT AAAGCCATAT ACTGAACATA TTGATAGCAT ACTCAATGAG ATCAAATTAC 60  
 ATCGTGAATT TATTATAGAA GTACCTTATA TGAATTCAAG GAAATTTGAG CTACTGATTG 120  
 CTAACATTGA ACAACTTTCT GTCGAATGTC ATTTTAAAGCG AACAAGTCGA AAGTTATTTA 180  
 45 TAGAAAAGCT TAAAAGTGTT CAATATGATT TACAAAATAT ATTAGATGGC GTAACACnAG 240  
 AGGGTACTGA TGGTTAAAAC AGTTTATGTA ACAGGTTACA AATCATTGCA ATTAAACATT 300  
 50 TTTaAAGATG ACGCACCTGA AGTACATTAT TTAAAACAAT TTATAAAACA TAAAATTGAA 360  
 CAACTGThGG ATGAAGGATT AGAATGGGnG TTAATACAAG 400

50

(2) INFORMATION FOR SEQ ID NO: 1538:

55

(A) LENGTH: 136 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1538:

10 ATATCGTTAC TGCTGTATGT TTCAATATCT ATATTCATAA ATTTCAAATn CTGACACCTC 60  
AATTTCTTTA AAATAAGGGG CAGAACCCAC TATGACTATA GGATCTCTCA CAGGTCAATT 120  
CGCAAATCAC TCGTGC 136

15 (2) INFORMATION FOR SEQ ID NO: 1539:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 85 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1539:

25 TAAATATCTC GGCACAATGA TGCGGGATAT TTTTTTACAA TAGGCATAAA GGCTGGAAAA 60  
AACATATCTA GTGCTATGAT ACTTA 85

30 (2) INFORMATION FOR SEQ ID NO: 1540:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 73 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1540:

40 ACAATTTGTT TATTTCAACA AATTATCTTT ATTCCACGAT GTGCACAAGT GGTGAAATC 60  
AGCTGAAGAC ACG 73

45 (2) INFORMATION FOR SEQ ID NO: 1541:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 106 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1541:

55

TGCAGGAATT CGATATCAAG CTTATCGATA CCGTCGACCT CGAGGn

106

(2) INFORMATION FOR SEQ ID NO: 1542:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 87 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1542:

ACATCAACTC ACCATAATA TATATTCACG GCTGACTGAT ACGACGAACG TCAAAGAATA 60  
 TGAGAGGAAT AGGACAAGA TCATCAC 87

(2) INFORMATION FOR SEQ ID NO: 1543:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1543:

GCTTATTCTG AAAAATATTT AAATTGAAGA AAAGAATATT CTAACACGG AAGTGGTATT 60  
 AACTAATAAC TAGTATCCTT TATAAATAAA CATAAAAATA TTCAAACGAA GGTCTACTAA 120  
 ATAACATCC ATAAAGTGAG TATAAGTTTG TTTGTAAAC TGAAGTAAAA AGCATAAGGA 180  
 ATTACACTTT AAATACATAT AGTACTTACG AATAGAAAAT AATCCCTTCA ACAGTAATTT 240  
 TTAAACAAAA ATAAGTGTG TTTTATGTTG ACTCTACTAG AATAACTTGA TATTATATAA 300  
 AAGTCGTCAA ACGGCACTAA TATTTAnNAA ACAAATGTTT TAAGTTGTTG GATTThAAAA 360  
 TATTGAATTA AAGTGTAAT TTGGACTATT GGAAATTGCG 400

(2) INFORMATION FOR SEQ ID NO: 1544:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 103 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1544:

ATAACGCTAA TCAGCCACAT TCAGTATTGT TAAATGGACA CACAAGCAGT TGATGAAAAT 60

## (2) INFORMATION FOR SEQ ID NO: 1545:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1545:

GGCTGTTATT GTTGTGGAGT TAAAAATGAA GGAAAATTAT AAACATGGTA AGCGTGTTTC 60  
 TCGTATTACT TTACTTAAAC nAACGGTATA ACCATACCTA ACTTAGTA 108

## (2) INFORMATION FOR SEQ ID NO: 1546:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 554 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1546:

AAATATGTTT CATATATTAT GAATCTAGCC TTAATCATAT TGCATTCAAA ATAATTTTAA 60  
 AAAATGAAAA GAAAGGATTT AGCATGCAAA AATTCAAAGA CTTTTTTTAC GATGATTTAT 120  
 CGGTACACG AGGAAATTAT TTTTAACTT TAATGGCAGC ATTTTTTATT ACTATCATTT 180  
 TATTTATCGG CATAGTTGTC AGTGAAGTAC ATTTACTTTA TAGCATGCTA ATTGTATTAG 240  
 TAGGTTTAAAT TCTATTGAGG CTATTCAAAA TCAATTTATT CTCTTTTAAA AAATTAACAT 300  
 TGTCTCAAGT TATTTATATT ATAGGCGGTG CACTATTAAT TTATGGGTTA GATAATCTTT 360  
 ATTTATATTT TCATGACGTA CCGGCAATGA ACAACAATTA GAGCAAGCAA TACGGAAATA 420  
 CACCATTTCTA TATTTCTATT TtCACTGTaC CATCATCCCC GCTATTGTGG aAGAAaTTGT 480  
 TTTtCGCGGT ATGATAATAA GGGkTATCTT CAGAAAACAC TTGTTTTTAG GGTAAATTGT 540  
 GTCTAGTTTA GTTT 554

## (2) INFORMATION FOR SEQ ID NO: 1547:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



TAAAGCAACA CTTTAAATCC CTTTGAAC TAGTTTATCC GCTAAATCAT AAGCTTCTTT 60  
 TTTGCTACTT ACAAAAATCA ATCCTTGTA AATTTACCT GAATATCCAT AGTAATCTGT 120  
 5 CTTTGAATA ATATAATTAA CTCTTCATC AGAAGTTAA TATCTCAGT TAGTTACATC 180  
 ATCTTCTTTA ATACCTTGAT GTACATAATC AGTCACACCA AAATAATGAA ATGGGACATA 240  
 AAATATCACT TTCTAATGCT GCTTGTAACC TTATTTTATA TGCAATATTA TAATCAAACA 300  
 10 GTTCAAATAT ACTTAATTCA TCTGGATCTT TCTGGTGGTA GGCAGGTCAT TCCCAGCAnG 360  
 AACTTAGGGT TTGGAGGTAG GTTAAAATAC TCGGTTGGAT 400

15 (2) INFORMATION FOR SEQ ID NO: 1548:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 73 base pairs  
 (B) TYPE: nucleic acid  
 20 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1548:

CGCTCTAGAA CTAGTGGATC CCCCgggCTG CAGGAATTCG GCACAGCATA TCTAGTATTT 60  
 TAGGACGGAG GGA 73

30 (2) INFORMATION FOR SEQ ID NO: 1549:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 73 base pairs  
 (B) TYPE: nucleic acid  
 35 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1549:

GTATCCAAGC AGCTTTTAAA CAATATGGCA TAAACATTAT TAACGGCTAT GGTTTAACTG 60  
 ATGGCACCTC TTG 73

45 (2) INFORMATION FOR SEQ ID NO: 1550:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 120 base pairs  
 (B) TYPE: nucleic acid  
 50 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1550:

GTAACATGTA TAGTGAAGTG ACTACTAAGA AGnCGTATTG TGATATTGAT AGCAGCTGAT

120

(2) INFORMATION FOR SEQ ID NO: 1551:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 192 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1551:

GGTATGTATT AATTAAAATG TGGTCATGAT TGAAACAGCA ATGTAAAAAT AGCACAACAT 60  
 AATTnATAAA GGAGAGAAAC GGCATGCATG AACAGATTT TAGAATTTTA GAGGGTCAAG 120  
 ATATTACTTT GCCAGAATTA GGTAGAGAAT TAGAnAATAT TACAGGACAT ACGATTGCTG 180  
 ATTCTACTGG CG 192

(2) INFORMATION FOR SEQ ID NO: 1552:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 76 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1552:

CTAAGTTAGA TGCTAGTATA CAAGATTTAC AACAAAAGGT ACTGGAATCG AATTGTGAAC 60  
 TAGACAAACT AAATC 76

(2) INFORMATION FOR SEQ ID NO: 1553:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 135 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1553:

TGTGTTGGGG CCCCCTATAT TGAAAATTTG TTATAGGTGT ATTTCTTTGG TTAACATTTG 60  
 TTATATAACT TGTAATTTTA GGATGTTGAT TTTGCTTACC TTGTCTGCTA TGTAATGTCA 120  
 CATCAACATG ATThA 135

(2) INFORMATION FOR SEQ ID NO: 1554:

AATGCAGCTA TTACTTTTCA CAGATTCCAT ATCGTTCAAC ATTTAAATAG AGAACTTAAT 60  
 AAGTATCGTG TACAAGTTAT GAATGANTAC CGTAATAAAA AAGGACCTGA TTATACAATT 120  
 5 TTC 123

(2) INFORMATION FOR SEQ ID NO: 3232:

10 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 1656 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3232:

GCCTCAAAGA ACATGCTGAA CAGTCATCGC aTTCATATAG TTTGAAGTCT CGTTTAAAAC 60  
 20 CATATCTATC ATTACGGTAT GCATATCTTT TAAAACCTAT TCTTTTGTTA TTAGGACATA 120  
 TAAATTCATC ATTAAGTTCG TCATATTTCC AATTTTGAGT GTCGAAAATG TCACTTTTAA 180  
 25 ACTTTCTAGT TTTATCTTTA ATAAACATGC CATACGTAAT AAGTGGCGTT TTATTAAAAT 240  
 CATCTATAAT GGCCATATAG TTTTGCTCAC TACCATAACC TGCATCAGCT ACAAATAACC 300  
 GAAGtATTTT GAATCATTGT TAAAAATGGA ATTAAAGTTC TAGTATCTGT CGGGTTTTGA 360  
 30 AATAGGTCAT AGGATAAAAC AAATTGAGAA TTTGTCGCTA TTTGTAAATT GTATCCTGGC 420  
 TTAAGTTGGC CATTTTTCAT ATGGTCTTCC TTCATTCTCA TAAAAGTTGC ATCATGATCA 480  
 GTTTTAGAAA ArCTATTTCT ATCTTTAAGA ATCGATTTTT GTTCTTCATA TTTATTTTTT 540  
 35 CTTTCGGAAT AATCATCAAA TTTmTTTTTG AACTTCTTAA TCTTAGTTCT TTTTtaCGGG 600  
 TCTGTTTTCT AATTGAGTA CTATCTTCGT TCTCAATAGA ATGATTTAAA yCTTCGATTT 660  
 CTTTATCTAA ATGACTACCA ATTAAATCTA TTTCTTCTAT TGTTAAATCG CTATCTCCAT 720  
 40 CTTCTTTTAT CTCTGGTATT ATTTTTTCTT CAACTAAGTC ACGATATAAT GTTTTTGAAT 780  
 TTTCGTTCAA TTTCGATTCTG TGATTTTGAA TACTTTTCTT CCACACAAAT GTATACCTAT 840  
 45 TGGCATTAGC TTCTACTTTT GTACCATCAA TAAGATTTTG CTTTAAACAT TGACTATGAA 900  
 ACTGGATAAA TAAAGATTCA ATTAACGCAT CAGTATTAGG ATTCACTCTA ATACGATTAA 960  
 TAGTTTTATA AGAAGGTGTT TGATTTTGAG CTAACCACAT CATTCGAATA CTGTCATGAA 1020  
 50 GTAATTTCTC TATTCTACGA CCAGAAAATA CAGATTGAGT ATATGCATAT AAGGTGATTT 1080  
 TTAACATCAT TTTTGATGA TAGGATGTTG CGCCACGATG ATGTCTGAAT TTATCGAATT 1140  
 CGCTATCAGG TATCGTTTCA ACAATTTTCAT TAACATATCG CGAAATATCA ATTTGAGGAA 1200

55

GGCACTTCAT TAATTTAGTT TAGTGGTATT TATTAAATTA TACGAAGGGA CCCAACACAG 1320  
 AAAATTCAAA TTATTGAATT AAACATTTAT GTGCAAGTTT GGCAAAGTGT CTTATTTTTTT 1380  
 5 AAAAGTATGT AAAAGTAAAA TTACATGTTA ATACGTAGTA TTAATGGCGA GACTCCTGAG 1440  
 GGAGCAGTGC CAGTCGAAGC CGAGGCTGAG ACGGCACCCT AGGAAAGCGA rCCATTCAAT 1500  
 ACGAaGTATT GTATAAATAG AGAACAGCAG TAAGATATTT tCTAATTGAA AATTATCTTA 1560  
 10 CTGCTGTTTT TTTAGGGATT TATGTCCCAG CCTGTTTTTT GTGATTTTAA ATAATTTGAA 1620  
 TATGGrAAAT GTATTAWTct CTCATTTGTA TAGATT 1656

15 (2) INFORMATION FOR SEQ ID NO: 3233:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 130 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3233:

25 TTGCTCATAA ATCTTTTCTT GGCGCTCTGA AACTATCTT CTATTCTGTC GGAATTTTTC 60  
 AAACATAGTC TTATCATTTn CTTCTAATCG CGTTAAACGC CAATCTTGTT CATGTCGTTT 120  
 30 GGTAAATCCA 130

(2) INFORMATION FOR SEQ ID NO: 3234:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 122 base pairs  
 35 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3234:

GCCACGATAA AGAAGTAAGA ACAACACATG GTGTTACTGG TACAGGCTCA TGTTCTTGGG 60  
 AAAGTTATTT GTGnAAAAATG GTGTGAATTA CCTGGGGAAA AATCAACAAA CTGACTATCC 120  
 45 AA 122

(2) INFORMATION FOR SEQ ID NO: 3235:

(i) SEQUENCE CHARACTERISTICS:  
 50 (A) LENGTH: 173 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3235:

5 AACCAGGATA TGAAATCTGT GACTTATTGC GTTAGATCGT TTTGTAACTG CTACTATTGA 60  
 AGAAGCAGAC CAATATAAAG GTACCATTCA TTGCAAAAGC ATTACATGCA TGAACCCAGT 120  
 TGACATTTAG TTAGAGATGG AAGATAGTAT TGTGCATTGT CAGnTTCCAC ATG 173

10 (2) INFORMATION FOR SEQ ID NO: 3236:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 122 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3236:

20 GCGGTGTGCA TTTGAAAATG TTATCAAGAA TATTGAGTTA ATTCGCAACG ACATTATACC 60  
 AGCGATTAnA AAGCATTTAT CAAAATACGA GGGGCGTCAT CATGAATATT GTATTATTGT 120  
 CA 122

25 (2) INFORMATION FOR SEQ ID NO: 3237:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 182 base pairs  
 30 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3237:

TTTTTTGCCC AAAATTTTTG GGTTTTTTTT GGGTTAAAGG AAAAAAATT TTAAAGGGG 60  
 GGGGGGGGTC CCCCAAAAT TTTTTCCCT TCCCTTTGGT TTGGTTTTTT GGGGGGGGGG 120  
 40 CCCCCCCCCT TTGAAAACC CCTTAAAAA ATTTAAngGT TAAATTGGAA AAAAAATTT 180  
 AA 182

45 (2) INFORMATION FOR SEQ ID NO: 3238:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 111 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3238:

55

GATGAnGTTc GACAACGTAT TGTGGCAGAT GTTGcAGTTG ACTTTGAAGA A

111

(2) INFORMATION FOR SEQ ID NO: 3239:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 120 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3239:

AGTTGATCGT ATTTTCCAGA AGAGACAGAA TTAATTGATT ATCGTGTTAG TTCTGTCACT 60  
 GAAGGTACTG ATGCCCAAGC AGnAGTACAT GTAAGTTTAT TGATTGAGGT AAGACTGTCA 120

(2) INFORMATION FOR SEQ ID NO: 3240:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 127 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3240:

TACACATCTn TCTACGATTG TAGTTTATCG ATAGGTTTCG CATCATGAAA CGTGATAAAC 60  
 AACCAACATG ATGCTAGTTT GATTAAGTTT CTTCTAAACA GACTTCAAAC GGCAGTGTTT 120  
 AGCATAT 127

(2) INFORMATION FOR SEQ ID NO: 3241:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 124 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3241:

GACTAAAATA CATGTTGGAA TACTTGGTCC CATGGGAAAA TATTGGACTG GGTAACCCAA 60  
 TCACGGCTTC TGAAGTAGTT CTTTnTCTTC TATTAAAATA GCGACGGAAT CACACCTTCT 120  
 GCGG 124

(2) INFORMATION FOR SEQ ID NO: 3242:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 122 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3242:

TACGTGTATA CACCGTTATC TTTATGGCTT TGAATTTCCA TAATAAATAC ATACGGnTTT 60  
10 TGTGCAGAGC TCAGCACATA ATCATCTTTA ACTATAGTTT CTGGGAATCA CTTCATAGTT 120  
TT 122

(2) INFORMATION FOR SEQ ID NO: 3243:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 221 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3243:

AACCTTTTCT GCAACCATAC GCCATAGgTA TGtTTTCTTT TTACAATTAA AGaGCCAACC 60  
25 GTTGTATATAG TCTAACAATG GTTGGCTCCT CTTtTTTTAT GTGCTAAAAA TTTATAGGCA 120  
ATTTTATTAC AACAATGTAC ATTTAAGGTG ACCTTCATGC CAAAATCGCA TCACTCATT 180  
30 AATGGAAGCA GCACGTCTTC ATACAAAGTC ACGATCCTAA T 221

(2) INFORMATION FOR SEQ ID NO: 3244:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 224 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3244:

TTGCATTTTG ATTGTCTGGT GACCTTGGCA ATGACAATTC CCGCTTGCAA TCGGTATCTT 60  
CAATATTATA ATCAGGTCTT GCCTTAGATT TTCGCTAAGT ACCGGTGATT CTCTACCATC 120  
45 ATACTCACCT CATGnGCTAT TTTTCTAGAG TGCTTCTTTT CACACTTTAT CTTATAAAAG 180  
GCTAGCTACT ATTACCGATT TATCATTATT AGTGgTTTTT ACCn 224

(2) INFORMATION FOR SEQ ID NO: 3245:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 117 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3245:

5 GAAAGAGATT AGTGACAAGT TGGTTGTACT ATTACGTTAA AATTTGGAGA TTATGTGTGG 60  
TGTTC AAGTA TGC GTTCa nT AATTGATATT GGCGCACCGT ATAACCATGT CAAAGTA 117

(2) INFORMATION FOR SEQ ID NO: 3246:

10 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 117 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3246:

CTACAGGCTT TCGTACCACA GGATCAAAAC TACGCACTGT GCCTTG TACA TACGCATGAT 60  
20 CAGCAATGAC ATTCCAAGTA TTACCACATG ATATTTGnCC AATTGTTACT ACCGTTC 117

(2) INFORMATION FOR SEQ ID NO: 3247:

25 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 117 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3247:

TACACa nCTT TCTACGTGTG TAGTTTATCG ATAGGTTTCG CATCATGAAA AGTGATAAAC 60  
35 AGCCAACATG ATGCTAGTTT GATTAAGTTT CTTCTAAACA GACTTCAAAC GGCATGT 117

(2) INFORMATION FOR SEQ ID NO: 3248:

40 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 135 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3248:

CCCCGTCCTTT GGTGGAACCG TTTTGTAGAA TTAAATAATA TTACAGAGCC GCTAGCAGTA 60  
50 ACGATCCAAA CGAATTTACC ACCATCACGT GGATTAGGAT CGAGTGCACT GTCGCGGTTG 120  
CnTTTGGTCC TGCCA 135

55



- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 106 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3249:

AAAAGCCAAC CCATGnAATG TTGGATTGGC TTTTACATG CCATCTGAAT CTCTAATTTT 60  
 AAAAAAATAT GGAATATAAA TAAGACAGTA AAAATTAAAT TTCAGT 106

(2) INFORMATION FOR SEQ ID NO: 3250:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 122 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3250:

AACGCTGAAG CAGATAAAAA ACGTCGTGAT AGAAGTAGAC TTAAGAAACG AGTCTGACAn 60  
 TCTAGTATTC CAAGTTGAAA AAACTTTTAA CTGTATTAG GCGAAAATAT CGGTGAAGAA 120  
 GA 122

(2) INFORMATION FOR SEQ ID NO: 3251:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 132 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3251:

GAACGTTGAG ATGTCACAAA CTGGTGAAAG TGCACGTTCA ATGCCAATGA CTGATAAAAC 60  
 CAAATTCATC AATCACAAAT ACTCCGAAAG CnGGTACAGG TCACTCAGTA AGTAGTAATC 120  
 CCAGTACATT AA 132

(2) INFORMATION FOR SEQ ID NO: 3252:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 115 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3252:

GGAAAATCTT CAAATTCTGC AAATGCCAA TTTACCTAAT AACCAAACAT CTAAGGCATG 60  
 5 TGTAATGCTG CTACnTCCGC TTCGTCATCA GCTACAAATGA CAAATACAGG TGCCA 115

(2) INFORMATION FOR SEQ ID NO: 3253:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3253:

TTTCGTCAAA TTATGGGAAT AAAATAATCA TATTTAAGAT AGTAAATATT GAATAAGTTG 60  
 20 CTTTGAAATT TATAAAATGA AAGTATAGTG TCATGGGnAG TATAATAGTC AGATATATAT 120  
 GTAACGGCAC TATATTGAAA 140

(2) INFORMATION FOR SEQ ID NO: 3254:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3254:

AAATCTCCTA CTTTTTCTAC CCATAAATAA TTGGCTAACT TTTTCATCTT ATCTTCATCC 60  
 35 TTTCTCTTCT ATTTAAAATG CTACAAATAA ATTTCCGCGA GTAATTTTAA TGTTTTACAA 120  
 CGCTGTTCAA TACCTGGAAT AAGCGGTGCT ACTAACACCT CATCAACTTC ArACGTAGCA 180  
 40 ATGAAATCAT CTAATTGTGC TTAAACCTwT TCTTGTGTAC CTGcAATGAT GCGTGCTTGg 240  
 ATGTGCTTGA ATCATCTCTT TGTCTCGATC ATTAAGCTTA TACTTTTGTG CTGTGTCTAC 300  
 TGAAGGAAAA TCTTCAAATT CTGCAAATGT AATTACChA ATAACCAAAC ATCTAAGGCA 360  
 45 GTTGTAAGCG GChACTTCCG CTTCGTTATC AGChACAAG 399

(2) INFORMATION FOR SEQ ID NO: 3255:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 116 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3255:

ACCATTCGTC AAAATATTCC AACACGCATT TAGGTGTGCA AGGTATCGGT ACCTAACAAC 60  
 5 GAAGCTATCG TCTCACTAnC CTTAAAAGAT TTAGAACAA CAGCTGCACT CATCAT 116

(2) INFORMATION FOR SEQ ID NO: 3256:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 106 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3256:

AAAGACCTAA GGTATGTAA TTGGCCTAAA TTTATTAATC GTTTAA<sub>n</sub>TTC AGTTAGTAAA 60  
 20 AAGTCTGTGA GTAAGGGTGT ATGGAAACTG GTTAAATATT ATAGAG 106

(2) INFORMATION FOR SEQ ID NO: 3257:

(i) SEQUENCE CHARACTERISTICS:  
 25 (A) LENGTH: 114 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3257:

AACGTCCATC GTAATACCTT TTGTGTCTAA TGTAAGTGT ACATCGTCTA ATAATAAGTT 60  
 35 GACGATATCT TGACAATGCA TCTTTATCTA GATGTAAGAn TTCAACGGAT GCCG 114

(2) INFORMATION FOR SEQ ID NO: 3258:

(i) SEQUENCE CHARACTERISTICS:  
 40 (A) LENGTH: 117 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3258:

TTAAAGCAGT TAATCCACAG GGAAAGTGGT TAATACAGTT GGGCTCTGGT GGATAGTACA 60  
 50 GTTGCAGGCA TGGTGGGCTG GGAATTGCTT CAGGGTTTAA CGAnTGGGAA AAGCCTT 117

(2) INFORMATION FOR SEQ ID NO: 3259:

(i) SEQUENCE CHARACTERISTICS:  
 55 (A) LENGTH: 124 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3259:

GGACCGCCAT ATCGTTGGCA ATCATCGCAC CTATAATCAT CGCAAGTATA ATAATATTAG 60  
CACCTTGCAT ACTTTTAAAC CAGGTTGTTA ATGCCTCAAA AATATTAGAA ATTGGTGCCC 120  
GnTT 124

(2) INFORMATION FOR SEQ ID NO: 3260:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 130 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3260:

TACCAATGTA TATCCATATA CTTTATCAT AATCATTTCA GCCGACTTTA GTTGATGTT 60  
TTTGCTTGAT TAAAATCTTT CGGCGATCTT CAGCTTGATG TTTTCGTTTG ATTAAATTGG 120  
TACAATAnAT 130

(2) INFORMATION FOR SEQ ID NO: 3261:

30

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3261:

GGCCTTTTTG GGCCGGGGTT GGAAATTGGG GTTGCCTTAA TTTTAAATT AAATTTTGGA 60  
ATTAAAAAAG GAAAAAnTCC AAAGGTTAAT TTAAAAAAA GCCCAAGGTT TTAAAAATTC 120  
CCCCAACCAA AAAGGGGGGG AAAAAAGGTT GGGGGTTTTA AAAATTAnCC AAGGTTTTTG 180  
GGGCCCTCCC TTGGGGGTTG GGAATTAAAG GTTAACCAAG GTTTTTGGCC AAGGGGCCCA 240  
ATTGGGGGTT GGGGCCCTGG GGGAAAATTT TTGCCCTTTC CCAAGGGGTT TTTTAAACC 300  
CGGATTTTTG GAAAAAATAA AGCCCATTTT CCCCCCAACC CnAAAGCCCA GTTCCCGCCC 360  
ATTTTCCCGG GGTAACCCTG CCCCACCGG GGCCATTTTT 400

50

(2) INFORMATION FOR SEQ ID NO: 3262:

55

(A) LENGTH: 134 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3262:

10 TGGTTCAATG GAAACGTGTA CCGCAAATnC CGTTAAATGT TGTTGGATGT TGAGAGACGT 60  
 GGCTGAACTG GCACATTTGG GCAATGACCA ATGGAACAAG CTAATGGGCA AGCGATTATT 120  
 GCGACGGCTG ATGG 134

15

(2) INFORMATION FOR SEQ ID NO: 3263:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 105 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3263:

25

TTTTTTCTG TTGGTACTTG TTTTGTGGTT GGCATTGTG GTGTGTCTGA nTTAGTAGAT 60  
 TGCATTGGTT GTGGCGTGT TGCTTGATGG AGGTGTTGTC ACTTT 105

30

(2) INFORMATION FOR SEQ ID NO: 3264:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 107 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3264:

40

GTTCCATCAT TCCACCAAT ATCCAACATG TGGGCTACTG CAATGCTTTA GCGTCAATG 60  
 CCTCATCATC ATCAGCGC CAGTAAATGC GTATAATTAA ATTAATT 107

45

(2) INFORMATION FOR SEQ ID NO: 3265:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3265:

55

GTCGTAACAA TGGTTCGTTA CCAAAGCATA nTTCGCCTTC TTGGCATCG

109

(2) INFORMATION FOR SEQ ID NO: 3266:

5

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 104 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3266:

15

TTACCTTTAA AATAAnGTTT TCCACTAGTT GGGCTAAACA AATTACATAT TTTGCTTTTG

60

GAAATGTACT TTTTACCACT ACCTGATGGA CCTATAATGG GCAA

104

(2) INFORMATION FOR SEQ ID NO: 3267:

20

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 117 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3267:

30

TAAGCCATCA GAAACAAATG CATATAACGn AACACACAT GCAAATGGTT CAAGTATCAT

60

ACGGTGCTCG TCCGACATAC AAGAAGCCAA GCGAGAACGA ATGCATACAA TGTAACA

117

(2) INFORMATION FOR SEQ ID NO: 3268:

35

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 101 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3268:

45

GCTGCACAAG CACAACCTGG AATCAGCAAC ACCGGCAAAC CAnCAGGTCA AGGAATAACC

60

AAGCAGCACC TCATAATAAT GCAACACCGG CAATCAAACA C

101

(2) INFORMATION FOR SEQ ID NO: 3269:

50

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 207 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3269:

CATACCCTAT TTTAGATATT ACCTTATTAC AAAATATTTT TACATTAATG TCAGCTGCAG 60

5 GTTAGTATTG TTTTCCAAAA TTTACCGGTC ATCTTTGCCA ATTGGGTGTC GCCAATCGGG 120

ATTTATCCTA GGAAGCCGAT TAAAAGGGTA CTGCCAGGGT TTTAGCCTGC nGCTGCCTCG 180

GGGTTTCTT TAAATTAATG nAACCGC 207

10 (2) INFORMATION FOR SEQ ID NO: 3270:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 107 base pairs

(B) TYPE: nucleic acid

15 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3270:

ATATTCGCAC CACCATAAAC ATAGATGGTG TTTGTCTCTT CTGCATTCAC AGTGATAAAA 60

GGGCTTGGnC CCGTTTTTGC TTCAGCTGTT TTGAATAATA TATGATG 107

25 (2) INFORMATION FOR SEQ ID NO: 3271:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 122 base pairs

(B) TYPE: nucleic acid

30 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3271:

TTGGTTACAC TTCTGCTAGT TTTAGTAACG ATGGTCCAAG ATTGTATGAG CCTATTCATG 60

GATCAGCACC AGATATTGCA GGTAAAAACG TTGCCAATCC ATTTGGGATG GTTCTnATGC 120

40 TT 122

(2) INFORMATION FOR SEQ ID NO: 3272:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 360 base pairs

45 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3272:

GAAGGATGAT GATTTCGGAGC AnCTTCTTGC AGAAGAnGCG GnAATAACGT GACATATTGT 60

55

TGCGAGCGCT TGACAATCTA TTCTTTTAA AGAAAGCGGT TGTTAGACAA TGCATTAAGA 180  
 GAAATTAAAG CGGmGTTTAC TTTTGTAAAT GAGCATTTGA TTTTtTGAAA ATAAAGCAGT 240  
 5 ATGCAGGCGC TTGACTAAAA AGAAATTGTA CATTGACAAC TAGATAAGTA AAGTGAAAAT 300  
 ATAGATTTTA CCCAAGCAAA ACCGAGTGAA TAAAGAGTTT TAAATAAGCT TGGATTCATA 360

(2) INFORMATION FOR SEQ ID NO: 3273:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3273:

20 TCAATTTTAA CTGCAAATAA TAAAGCTGCA TGATTTACTT TGTACATTAT TGTAATTTCA 60  
 GTAATACGAG GCAATGTCAG TnGCAGTGTT TAATAAATTT TGTTCGCTAT TT 112

(2) INFORMATION FOR SEQ ID NO: 3274:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 336 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3274:

35 TACATTTATG CAATCAACGT TACATTCAAT CGTTGGAGAA AATTGGCTTT ATTGACTTAC 60  
 TAAAATCTAA AAAATCATAT GAAAGAATTG CACATATGTT AAAAAcTGGT AAGCCATTAC 120  
 GTAATTAAAA GATAGTCATT AAGAGAGGAT GATAACCATG CAAGAAAGCA TACATTGTAG 180  
 40 CTTATGGGCG TTCAGCGCAG CGAAAGCAAA GCAAGGCGCA TTATTCCACG AAAAGACCTG 240  
 nTGATGTCGC AGCCAAAGTA ATTACAAGGC GTATTTGAAA ACGTATTGAC GGGAnAAAATT 300  
 CCAATAAGGA TTATGGATTG nAAGATGGTC CATTTG 336

(2) INFORMATION FOR SEQ ID NO: 3275:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 138 base pairs  
 50 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



CAAATGCTTT TGCCACCCCA GATGCAATGG TACCAACACC TGTTTTCGAA ACTAATTTTA 60  
 CCGGCGATAT CTGGCATCTT TTATTTTCGGC ATTTTTTCAA ATCATGGTTA TTCCAGTTTG 120  
 5 GCGGCTTAAA AATTCnTT 138

(2) INFORMATION FOR SEQ ID NO: 3276:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 101 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3276:

CATTATACGA GnATAAGTAA AATTGATGAT GTGACTAAAA AAGATGCACA ACAATTATTG 60  
 20 AAGATGCAAA AGAATTGCAT GCCAAGCTGA TACATTAGAT A 101

(2) INFORMATION FOR SEQ ID NO: 3277:

(i) SEQUENCE CHARACTERISTICS:  
 25 (A) LENGTH: 124 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3277:

TGGTTATTCTG TTCCTGATCG TTGTTGGTAT CTCACTATTC AAnATTATC GTGTGGCATT 60  
 35 ACTTTAGTTA CACCAGGTAC ATTTGAACCT GGCACTTGTT GCGAGTATTT CCGGTCTCGT 120  
 CATT 124

(2) INFORMATION FOR SEQ ID NO: 3278:

40 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 110 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3278:

GACTTTTTGA CCACTTGTAG CACGACCACC GAGAGTAGCA TTGCATATGC AATCATTGTA 60  
 50 CCTTCGCCAA CGACTGnGCC AATATTAATT GTTGCGCCCA TCATAACGAC 110

(2) INFORMATION FOR SEQ ID NO: 3279:

- (A) LENGTH: 113 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3279:

10 TTGGTATATA GAGGGCAACC GCACCTGATA AAATGTGnCA CAGTTTTTAC AAGAGGTTAA 60  
GGAATGAGTT TGGAGGCATA CGAGCATCAA GATACCATTG GATGTTAGTA ATT 113

(2) INFORMATION FOR SEQ ID NO: 3280:

15

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 101 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3280:

25 TTACCGTCAC CGTAATCAGT CCATACTTTA TCAGCTATAC CGGCTTTAAC AGCATAAATG 60  
TTCGTTCCCTG TAGGCATACC AAAGnCGATA CCATAGTGAC G 101

(2) INFORMATION FOR SEQ ID NO: 3281:

30

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 116 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3281:

40 ACTATGTTTG AnAAATTCGA CAGAATCAGA AGCACAGTCT GAGAACGCAA GAAAAAATTT 60  
ATGACAAGTT AGATAGAAAT TTCGACGAAC TAAGGGCGTG ACCAAGAAGA AGATGA 116

(2) INFORMATION FOR SEQ ID NO: 3282:

45

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 148 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3282:

55 ACTTGGTTAG ATAATATAGC GTCGATTGTA TCACGAGTGT CTGTTCCAGT CATTATAAAA 60

CGTCGTTCTG ATGCTTTTCC TGAATCAT

148

(2) INFORMATION FOR SEQ ID NO: 3283:

5

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 100 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3283:

15

AAATGACGAT AGAGTCAGGT ATTAACATCAT TTTnCAATAG TATCAGGAAG ACTACCAAGC

60

TTATGTTGAA GGGCATCTTT TGGCGTTACC GGGTTGGGCA

100

(2) INFORMATION FOR SEQ ID NO: 3284:

20

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 101 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3284:

30

TTAAGAAACC GAGCAGCGCA TAAncCTGCA GTACCTTATC GCTTCTAGAT AATCCGATTG

60

CGACACCATT GCAAGATGAC CGGTAATTTT GGAACATATA C

101

(2) INFORMATION FOR SEQ ID NO: 3285:

35

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 106 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3285:

45

TAAATATTT CGCATCCCTA CACGCTAAAA TAATACATTA CACTTAAAAC GGCTGTTTTA

60

AAGCATCCTC CCATAAACAT CATCTAGTTG ATAATAGGGG GGGGGn

106

(2) INFORMATION FOR SEQ ID NO: 3286:

50

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 95 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3286:

5 TTTAACAATA CCTCAGAACA TACTATGGAA ATTGCTGCAA AGTTAATTGG GCATGCATAT 60  
TGATCATAAT GCGCTTTTAA ATAAATGGT GGAGA 95

(2) INFORMATION FOR SEQ ID NO: 3287:

10 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 141 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3287:

TCGAAATAAT ATCTACGCAC ACTGATAACA TAAAAATGCC TGGTAGAATA CTAATGAAAT 60  
20 AAGTGCATAC ATGACCACAT GAATGCTAAT AACATGChAG AACCCATTTT TTGAATATTT 120  
CACCACTCGA ATCATCAATA C 141

(2) INFORMATION FOR SEQ ID NO: 3288:

25 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 107 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
30 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3288:

35 TAGCTGGACC AGAACACGGT TCGACGTTGC AGGAAGTCTT GAACAGTCGC TGAACGCCAA 60  
GGCGATACTT GGGTTATCCA TGGTGAAAGh AATGGATTGG TGGTGCA 107

(2) INFORMATION FOR SEQ ID NO: 3289:

40 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 89 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
45 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3289:

GCTTTGCAAT GCCGATGTTA CTCGCAATAA TCATGTCGCA TCAATTACTT ATGAAAAGCA 60  
50 GATTTACGTA TGTCTACAAG TTTAGGCGC 89

(2) INFORMATION FOR SEQ ID NO: 3290:

55

(A) LENGTH: 108 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3290:

10 TGTACGCCA ACAACAAATC CTACGTCGAC AACTATTTTT AAGCGATGAT TGCAATTAGA 60  
 CAGAAATCCA ATCATTTTTG CATTCCATCC AGTGCACAGA ATnTCGAG 108

(2) INFORMATION FOR SEQ ID NO: 3291:

15

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3291:

25 GATCAAGnCC TGAGAATTTA ATTTAATTTA TTTTATATT GGAGATGGTT AAAATGCTAA 60  
 AACTCAACAT GAGTAACCAA AATATTGCCC TTAAAAATGC TGATCATTG 109

(2) INFORMATION FOR SEQ ID NO: 3292:

30

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 121 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3292:

TTGATAATTT TGATATAGAA AGTTATTTAA AATTCGAATA AAAATAATAA CTCATCGACG 60  
 40 TTTAATGGCT AGGTTCCAAT CAACTATGnG ACATAAATTC AAATTCGATC ACGTAACGAA 120  
 A 121

(2) INFORMATION FOR SEQ ID NO: 3293:

45

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 107 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3293:

55

GCGCGTAATA CCTGCAGTAC CTCTATCGCT TCTAGATAAT GCGGTTG

107

(2) INFORMATION FOR SEQ ID NO: 3294:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 111 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3294:

AAAATGTTAA ACCAAAAAGT TTGGTGAGTT ATAATATGGA ATATTAAATC TGTAAGAAGAT 60  
 AAAGCGAATA TAAAGTGATT AACTTTGGTA ATAAAGAATT AACAGCGAAA n 111

(2) INFORMATION FOR SEQ ID NO: 3295:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 105 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3295:

CCCCGACTAA ATCGAACGCT TTAATGTAAT GATTTGTCCG AATCCCCATC CTGCACCTGA 60  
 TAATAAGGCG AATAGCAAGT TGGTTCCCGT nGGAAGCCA CTTGA 105

(2) INFORMATION FOR SEQ ID NO: 3296:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 201 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3296:

ATTTATTCAA AACCCGCCAC ATGGGGCAAC GGTTGCCATG GCATGATAGT CCAGATACAT 60  
 GGAAAGGAAT ACAGTCCGGT TAACACTCCA TTA AAAACCT GCGGGTTGGT TAAACCATTT 120  
 AACCTAAATG GGTTC AAGG GTTAACGCGG TTAAATGTT TGGAAAGGTT TnCCCAGTTT 180  
 CAAAAAGTT TTnATTCCC C 201

(2) INFORMATION FOR SEQ ID NO: 3297:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 415 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3297:

|                                                                    |     |
|--------------------------------------------------------------------|-----|
| TTTAGACTTT CATCAGTGTT GAATATTTCT CCTTTAACGG TTATAGGTAA TATTTCTCTGA | 60  |
| GAAATATTTC CATTCCTTAC ATTTTCCGCT GTCAATTGAT GACTTCGATA AGCAAATTCA  | 120 |
| TCTTGTAATT CTCTTGAAAC ATCATACATC TkGGCCACAT TTTcAGCACC TkGAATCATT  | 180 |
| GATGGGTCGC TCATTTcAGG TGCAAATGAT GCACGCTCAT AAAACTCAGG TAATGCTGTT  | 240 |
| TCGTACACAG AATGCGGTcG TTTGATTTTC CAAGGTGCTC GACTTGTA CTTCaACACCA   | 300 |
| CCTGCAATAT ATACCTTGCC AGCTCCGGCT TGGATCATGC GACATGCATA TTGaACACTT  | 360 |
| TCAAGTCCAG ACCCACAATTG cCGATCGrTT GTGaCGCCAG TATTGAAGCT TAAGC      | 415 |

20

(2) INFORMATION FOR SEQ ID NO: 3298:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 164 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3298:

|                                                                   |     |
|-------------------------------------------------------------------|-----|
| TTAATTGCAG CAGAGCGACT AGCTGATTCA GAGGTGTTAG TTTGTACGGT AATAGGATTC | 60  |
| CCATTTAGGT GCATCGACCA ACTGCCCGAC GAAAAGCCAT TTTGAAAACC AGAAAGATGC | 120 |
| CGATTCAAAA ATGGGTGCCA AGATTGAAAA TTTGGACCAA TGGG                  | 164 |

35

(2) INFORMATION FOR SEQ ID NO: 3299:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 106 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3299:

|                                                                   |     |
|-------------------------------------------------------------------|-----|
| GTAGATGCCA TTTTCACGTT TCTTAGTTAT TGGCAATTTT TAAATGCGAT GTGTGGCTTC | 60  |
| TACATAACGG GAAATTTTAA GTTTTATGAA TcACATATC AATTGC                 | 106 |

50

(2) INFORMATION FOR SEQ ID NO: 3300:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 102 base pairs

55

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3300:

AAAAGGTGTT ATGAGATTAG TAAATCANTA GACAAGCAGG TAAATTAAGT GATGTCGCGT 60

10 CATTTAAGGA AGCGATTCAC AATCGAGAAC ACAAAGTACA AC 102

(2) INFORMATION FOR SEQ ID NO: 3301:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 127 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3301:

TTAAAAGTTT GGAGATTATC GTGTCGTCTT CAAGTATGCG TTCATTAATT GATATTGGCG 60

25 CACCGTATAA CCATGTCAAA GTACCATTTG AATCAGTCA TTGGCGCATT GGCTGCCCTA 120

GCGTTCA 127

(2) INFORMATION FOR SEQ ID NO: 3302:

(i) SEQUENCE CHARACTERISTICS:

30

(A) LENGTH: 137 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3302:

CCAGCTAGAC GATTGCTAAG GTATTGGATG TTTGAAACGT CCATGGACCC AATTGATTAA 60

40 TTGGnTGTA CTGGGTCAAT GGGTATATCC TAAATGCACT GGCCTGCTGG TGTCTTCTG 120

GGCGTTGCTT CGGAAAT 137

(2) INFORMATION FOR SEQ ID NO: 3303:

45

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 399 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3303:

55



ATATAAATTA ACGACGCGTT AATGCAGGCT GATGTGATTT TTATTGGTTT CCCAATTTTC 120  
 AAGCTTCCAT CCCTGGTGCT TTGAAAAATG TGTTTGATCT ACTTCCAGTC AATGCGTTTC 180  
 5 GTGACAAGGT AATAGGACTT GTAGCGACAG CAGGTTCTAG TAAACATTAT TTAATTCCTG 240  
 AAATGCATTT AAAACCAATA TTGAGTTACA TGAAAGCACA TACGATGCAA ACGTATTATT 300  
 TATTGAAGAG AAAGATTTTT CAAATCAACA AATTGTCAAT GATGATGTTG TATTTCGGTT 360  
 10 AAAAGCGTTG GCACAATCCA CAATGCGAAC TGCCAAAGT 399

## (2) INFORMATION FOR SEQ ID NO: 3304:

(i) SEQUENCE CHARACTERISTICS:  
 15 (A) LENGTH: 102 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3304:

CACCATTATT TACAGGACCT nCGATGACGT GTGGTCCTGT GTTAAGACAT AACATAATAT 60  
 25 TCTACCTTTG TAATCAGTAC GGGTTTATCT ATCACAGTAC GG 102

## (2) INFORMATION FOR SEQ ID NO: 3305:

(i) SEQUENCE CHARACTERISTICS:  
 30 (A) LENGTH: 202 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3305:

TCAGCGTTAT CAATGAnTGA CTCTAATGCC TTTTACCCTA TTTTGTAAA TGGAACATGG 60  
 AAGCATAGAG ATGCGrAGTC AGCTAGCGAC TTACCTTGAC GTTTTGGCGTA TTCATTCCAG 120  
 40 CTTTGTGGGr ATGAGCGGAT ATAAGCATCT TTAGATAATG CACCATCAAC TAATGGATAT 180  
 TTATGTCCAG TTGGACGCCA GA 202

## 45 (2) INFORMATION FOR SEQ ID NO: 3306:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 151 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

55

AAGATAGGGA TTTACACCTA TACCTCGTTC CGGGGAAGGG TCGGTGTTCT GAAAAGTTGG 60  
 AACTACTCCC GncAAATATT AAATTATGGG AGCGGGAAGG ATCAGGGATT TGACACCTAT 120  
 5 GACCTCCATT CCCAGGGAAG GGAATGTGAT T 151

(2) INFORMATION FOR SEQ ID NO: 3307:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 87 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3307:

AATTCGTTA CCTGCGCCTT CTTTTGCGG TTTTAAATA AGCGAAAATT TCAGGCGGTA 60  
 20 AGACATAACG TCCCAGAATA GCTAGGG 87

(2) INFORMATION FOR SEQ ID NO: 3308:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 129 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3308:

ATGATGGCAA AGTCACCAAA CTGATTGTGC ACACCAATCC ATCCATCTGC GCTGTAAATA 60  
 35 ATGGTTCGCA ATAATTTTAA AATACCTTCC GCTACATTG ATTTAAAGCT GGTTGCGCAn 120  
 TGGACTAGA 129

(2) INFORMATION FOR SEQ ID NO: 3309:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 128 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3309:

GTTCCTTTTA TCGTAGTTGG TGGGACTCCT TATCGGCATC GCGGCTGGAC TCTAGGCGGT 60  
 50 GGAnACGGAC ATTCAAAAGG GATTAGTTC ATCCAGATG GATTTCATTT TGGGGAATTC 120  
 CATTTGGA 128

5 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 83 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3310:

GTACGATTCA GCATAAAGTA CACCACATTT GTCCTACGA CATCTGTAGC TGGTATTGAT 60  
CATGCAATCA TGAATAACGC TAA 83

15 (2) INFORMATION FOR SEQ ID NO: 3311:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 85 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3311:

25 CTGAGGATAA AGCGTCTCCA AGATAAGTCT AAAGATCATC ATAATGGGCA AAAAAGGTGG 60  
CAGCGATTTCG GTGGCTGGGA ACAAG 85

30 (2) INFORMATION FOR SEQ ID NO: 3312:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 129 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3312:

40 ATTTTATGTC TAAATGCTGG ACCAACAGTA TTGGCTATTA TTTGGTAACG TGATTACTAC 60  
AAAAAATGGA CCGTTGAGTT CGTGGCACAT GATTGATTTT GTAAGTAAGT ATGATGCACA 120  
TGGGCTnTT 129

45 (2) INFORMATION FOR SEQ ID NO: 3313:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 82 base pairs  
(B) TYPE: nucleic acid  
50 (C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

55

TCACCTAAAA TTAATCAAGG GACTTAACAT TGGCGAGTCA AGGTATTGAT CAAGCTAATG 60  
GCACAGTTAA ATGATGCCAA AG 82

5 (2) INFORMATION FOR SEQ ID NO: 3314:

10 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 87 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3314:

ATGTTATGGA AGAATATTGA GTTAATTGGC AACGACATTA TACCGGCGAT TAAAAAGCCT 60  
TTATCAAAAT AGTGAGGGGC GTCATCA 87

20 (2) INFORMATION FOR SEQ ID NO: 3315:

25 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 136 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3315:

TGAACCCGTC GTTGCCCATTT TGCCGGTTCC CGAAAGCCGG CGCCnACGGT TCTCCCTGCC 60  
TAAATAGGGG ATGGAATATT AAACCATCTG CACCTGGTTT AACACGCTTT GCAATTGAG 120  
TTAAGACATC ATAAGG 136

35 (2) INFORMATION FOR SEQ ID NO: 3316:

40 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 108 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3316:

CATTGGCTGT GTCCATTTTT AATCGTTGCG AGTACGTnTA TTAGCAACTT GGAAGTGCCA 60  
TTGTTAATTT CAGCTGTCTG TTACATTTC ACCATAGTCT TTCACAAT 108

50 (2) INFORMATION FOR SEQ ID NO: 3317:

55 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 142 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3317:

|                                                                   |     |
|-------------------------------------------------------------------|-----|
| ATCTGAAGCT GGGTTTACTA GAGAAGGTAT GTACGTGACA TGAATTACTA ATGGATTTAT | 60  |
| TCATCGAGTT ACATCTATAG TTTATTAAAT CAGATACGCC AAAATGCnAA TTAGCTTACA | 120 |
| AAGATGATGC ATTAAATGCA CG                                          | 142 |

10

(2) INFORMATION FOR SEQ ID NO: 3318:

15

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 386 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3318:

|                                                                   |     |
|-------------------------------------------------------------------|-----|
| AACATTATGT TAATCAACCT AATGAACGtC TTTATAAATT ACGCTAAACA ATATACAGAT | 60  |
| ATGCCGTTTC TTATCATGCT GGATGAAGAT GAAAATGGAT ATAAAGCGGG TCGATTTTTA | 120 |
| AGAGCGAGTG ACTTAGGTCA AACACAGAG CAAGGCGAAT GGAAGCCAGT TATTCATGAT  | 180 |
| GCAATCAGCG ATAGTTTAGT AGTACCTAAT GGCACAATGG GTCAACGTTG GGAAGAAGGT | 240 |
| AAGAAGTGGA ACTTAAAACT AGAAACAGAA GATGGTTnTA AAATTAnCCC TACATTATCA | 300 |
| ATGACAGAAG GTGGATACGA ATTAGAAACA ATTCAATTCC CATACTTTGA TAGTGATGGA | 360 |
| GATGGGATAT CATCGTCCAA TCCnAC                                      | 386 |

35

(2) INFORMATION FOR SEQ ID NO: 3319:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 123 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3319:

|                                                                    |     |
|--------------------------------------------------------------------|-----|
| ACAATGAATG ACATGATTCTG AGGTGGACGA CCCCTCCTAT TTTGCATAAA TGCTTTTTGA | 60  |
| ATCGCCGGTC ATAATGTTCTG TTGnCCAATT AACTCAATAT TCTTCATGAC ATTTTCAAAT | 120 |
| GGC                                                                | 123 |

50

(2) INFORMATION FOR SEQ ID NO: 3320:

55

(A) LENGTH: 104 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3320:

10 GGCGAACTGT CAATTGCCGG TATACAACGT ATTTTAAGAG CTGCAGAACA TnCGGGTGTT 60  
 AAACGTGTGG TCAATGACTG CCAACTTTGG TGCAGTTGGT TTTA 104

(2) INFORMATION FOR SEQ ID NO: 3321:

15

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 74 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3321:

25 GCGCCGGTTT TAACAGGTAA TTAAAAACCA AATACTGATA GTAATGCATT AATAGTCAGC 60  
 AAAATACAAG TATT 74

(2) INFORMATION FOR SEQ ID NO: 3322:

30

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 87 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3322:

35 TCACTCAGGG GGAGATGTCA ATGGGTCAAC ATTATTTGAC AAGGTGTGGA CAGACATGTG 60  
 40 TTATACGGGA AATTGGGCGA CCGCACT 87

(2) INFORMATION FOR SEQ ID NO: 3323:

45

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3323:

50 TGCCAAATGT TCCATAAATT TCATTACGAn TCTTAAGTAG GTGGCTATCA TTACGATGCG 60

55

AATGCGGTCG GAAAGATAAA TAGCTTCATC AATGTCATGC GTCACTAAAA TAATAGTTGA 180  
 TTGCGTTTTA TGTTTTAGTT GCACTAGTTG ATCCTGAAGT TTATAACGTG TAAATGCATC 240  
 5 TAATGCACCT AATGGCTCAT CCATCAATAT AACGTTAGGC TTATGCACAT GCGCTCGACA 300  
 TAGTGCCAAA CGTTGTTTCA TACCCCCGGA cAGTTGCTCG GGAAAATGCT TTCCCCTGTC 360  
 TTCTAAATCA ACTAATTTAA GCTGTGCGTT AATCTCTTCA 400

10 (2) INFORMATION FOR SEQ ID NO: 3324:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 106 base pairs  
 (B) TYPE: nucleic acid  
 15 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3324:

GAAACCATCG ATTGTAGCAC GAACCATGTT GGATTGGTGT GTTTGnATCC TAATGTATTT 60  
 ACTTAAGATA TCAGTGATAC CTGTCTAATT GCAAGTACGG TCAGGA 106

25 (2) INFORMATION FOR SEQ ID NO: 3325:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 113 base pairs  
 (B) TYPE: nucleic acid  
 30 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3325:

TCTGAAnTCG CTGTCTGAAT CTGGAATCAC TGTCTGAAAT CCGAAATCGC TAATCTGAAA 60  
 TCCTGAAATC CGCTAATCTG AAACCTGGAA GTCGCTGGTC TGGAAGCCCT GAA 113

40 (2) INFORMATION FOR SEQ ID NO: 3326:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 78 base pairs  
 (B) TYPE: nucleic acid  
 45 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3326:

TGTCACGTAC TTGCTGTTCA ACAAATACGT CTTACTGGAC GTGCACCTCA TTCTTCATCA 60  
 TAGCCTTCTT CATTAAACC 78

55

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 119 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3327:

AATTGAAAAT TATCTTACTG CGGTTTTTTAG GGGTTTATGT CCCAGCCTCT TACTCnAATT 60  
ATATTCAC TA TCCATTAGAC CAAATGGGCC ATTTC CAATA ATCCCGCGGT GGTTC CGA 119

(2) INFORMATION FOR SEQ ID NO: 3328:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 71 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3328:

GTGTTAAAAC GTCACGACGT TTGTTTAAAA TGATGCGTCA TAATGTCTAC ACTTTGCTTG 60  
CGATCATTCA T 71

(2) INFORMATION FOR SEQ ID NO: 3329:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 70 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3329:

CTGACGAACC TTGCATCATT TAACTGTCCA TTAGCTTGAT CAATACCTTG ACTCGCAATG 60  
TTAAGTCCTT 70

(2) INFORMATION FOR SEQ ID NO: 3330:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 69 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3330:



CCAAATCTCG

69

(2) INFORMATION FOR SEQ ID NO: 3331:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 70 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3331:

GGACACTAAC ATTAATATGG ACTGGTAATG TTGCTGTAA TAAACTCATA CCAAATCCTG  
GGCATCTCTT

(2) INFORMATION FOR SEQ ID NO: 3332:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 82 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3332:

CCTTGGGCAC CTTCAATTG CATATTACGA CGTTTTGCAG CITGGTTCAA TTGGCAATAA  
CTACACCTAG TGCAGTTGGA TC

(2) INFORMATION FOR SEQ ID NO: 3333:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 76 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3333:

ATAAAATAAT TAGAACTCTA ACATTGGTTT AACTAATGTT TAGACTTTTT GTGGTTTGTA  
AAAACAAGTA TATTGA

(2) INFORMATION FOR SEQ ID NO: 3334:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 74 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3334:

5 TGCTAAGTTG AATAAAGTAT TGAAATCGTT GCCAATATCT TTATACCGTT GGTTCTCTGGC 60  
ATTATATTGGG AGGC 74

(2) INFORMATION FOR SEQ ID NO: 3335:

(i) SEQUENCE CHARACTERISTICS:

10 (A) LENGTH: 74 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3335:

AGATAGTTAT GCGCAGTTAA AAACGGTGAA ATGTATTTGC AATAATATGC ATATAGGCAC 60  
20 CATACGAGTA AGGG 74

(2) INFORMATION FOR SEQ ID NO: 3336:

(i) SEQUENCE CHARACTERISTICS:

25 (A) LENGTH: 76 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3336:

TTGAATCATT GTTAAAAATG GAATTAAAGT TGCTAGTATC TGTCGGGTTT TGAAATAGGT 60  
CATAGGAGAA AACAGG 76

35 (2) INFORMATION FOR SEQ ID NO: 3337:

(i) SEQUENCE CHARACTERISTICS:

40 (A) LENGTH: 72 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3337:

CCAAAGAGGC GTTATTAAGC TATTGATAAA AGTTATGTTA CTAAAAAATG TATTTAAATA 60  
AGTAGTACCT AA 72

50 (2) INFORMATION FOR SEQ ID NO: 3338:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 75 base pairs

55

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3338:

ATAAGTCGTT CTACCGTATA GCCGTCATTA TTAATCACAA ATAATACCGG TTAAATATGC 60  
TGTCTGGTCA TAGTT 75

10

(2) INFORMATION FOR SEQ ID NO: 3339:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 72 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3339:

TTCATCAAAG TATTCCAATG GGAGAAAAAG CACAATAACA TTATCACTGG ATGCTAAATC 60  
TAAAGGAACC TC 72

25

(2) INFORMATION FOR SEQ ID NO: 3340:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 77 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3340:

GTAAAAATAT TTTAATGAAT GTCTTCACTG GAGAACCATT GACAACCTGG TACAAGTGGG 60  
ATTATTGGCG TTATTTT 77

40

(2) INFORMATION FOR SEQ ID NO: 3341:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 67 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3341:

AACCAAGGAT GGATTGCTAT TTTAATCCTT GGTGCTCTT TATTTTATTT AAATTGTAGA 60  
ACCTAGA 67

55

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 74 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3342:

CTGGCAAAAG CACGTTTTAC AAGCATCAAT CCATTAATTA ATAATTCCAT TAAATGTAGC 60  
 TTCACAGGGA TATG 74

(2) INFORMATION FOR SEQ ID NO: 3343:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 415 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3343:

GTTTGATCAT TAGAGAGATA TAGATATGCC GTAGAAAATA ATATGTCATT TGCGGATATC 60  
 ATGGTTAAAG AAGAAATGGA ATTAAGCGGT AAATCACGTG ATGAAGTGCG AGCGaAATGA 120  
 AACAAAATTT AGATGTCATG CGAGACGCAT AATCAAAGGG ACGACAGGTG ATGGGGTTGA 180  
 AAGTGTAcGG TCTACACTGG TCATGATGCT GCTAAACTAC GTGATTATAA TGAAACACAT 240  
 CATGCTTTGT CTGGGATATG AAATGATTGA CGCACAAGGG TGCCATTGCA ACAAATGAAG 300  
 TCAATGCTGC CGATGGGTAT TATTTGTGCA CGCCAACAGC TGGTTCCTCG GGTACCATTG 360  
 CCGGTGGCAC TTTTAAATTA GAAAAACAC TGGATnGAAC CAGAAGAGCC AATGn 415

(2) INFORMATION FOR SEQ ID NO: 3344:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 84 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3344:

TCCTATACCA CCACGTCAA CAGCTCCTGC CATCGATCGT ACTTTCAATA AGTCCAATAA 60  
 TCGCAGTGGT AATTTCTAAT ACTA 84

(2) INFORMATION FOR SEQ ID NO: 3345:

(A) LENGTH: 474 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3345:

10 CGGGAGGTGT TAAnTCTTCA CAAAATGCCG TACTATTCTT TGATGnAATC CATCAAATTA 60  
 TCGGTTTCAGG TGCCACAGGA AGTGATTCAG GTAGCnAAGG GTTATCTGAT ATTTTGAAAC 120  
 CTGCATTAAG TCGTGGTGAG ATTTCTATTA TTGGTGCaAC AACACAAGAT GAATATCGAA 180  
 15 ACAATATTCT TAAAGATGCT GCATTAAACGC GCAGATTTAA TGAAGTGCTT GTTAATGAAC 240  
 CAAGCGCTAA AGATACTGTT GAAATTTTAA AAGGTATTTCG CGAAAAATTC GAAGAACACC 300  
 ATCAAGTAAA ATTACCAGAT GACGTATTAA AAGCATGTGT TGACTTATCA ATTCAATATA 360  
 20 TTCCACAACG ATTATTACCA GATAAAGCAA TCGATGTGTT AGATATTACA GCAGCACATT 420  
 TATCnGCGCA AAGnCCAGCT GTCGATAAAG TTGAAACTGG AGAACGAATT TCTG 474

25 (2) INFORMATION FOR SEQ ID NO: 3346:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 64 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3346:

35 AAAATTAATA ACTCCTTGGT TATTGATATG CCTAAAGAAG AAGGTACAAT ACAACTAACA 60  
 TTAG 64

40 (2) INFORMATION FOR SEQ ID NO: 3347:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 89 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3347:

50 AGGAATAACT TGATATTGAT GATAAAATCG TCAAACGGCA CTAATATTTA AAAACAAAT 60  
 GTTTTAAGTT GTTGATTTAA AATATTAAT 89

55 (2) INFORMATION FOR SEQ ID NO: 3348:

(A) LENGTH: 107 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3348:

10 ATAACCTGTA CTGCTTCCCA TTAATCACTG TGTCTCTTCA CCAGGAGCTG GCATTTCCTT 60  
 AAAGAACA<sup>n</sup>T TCTGATAAAG GTACAATTTC ACCGGGCATA ACTTCAT 107

(2) INFORMATION FOR SEQ ID NO: 3349:

15

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 74 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3349:

25 CAACGCATCC TGCACCTTTTA CCTATTCCTG AATCACC<sup>g</sup>GT AATTAGTACA CCAACACCGT 60  
 AAACATCTAC TAAA 74

(2) INFORMATION FOR SEQ ID NO: 3350:

30

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 62 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3350:

40 AGATGCACCT ACTTCTAACT GTCGCCAACA TCGCCGCAAT CATTTCAAAA CTACGTTCTG 60  
 TA 62

(2) INFORMATION FOR SEQ ID NO: 3351:

45

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 73 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3351:

55 GCTGCAAACA ACAAACTATT TTTGATTAAA TTGTGGATAT GATGGTAACC AACCAAGTCT 60

## (2) INFORMATION FOR SEQ ID NO: 3352:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 77 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3352:

ATTGAACGCA AGATTTCGAT ATAGAACATC TAGCGACGTC GATTGCAAG GTTGAACCAT 60  
CTACATTAGG TGAGGAA 77

## (2) INFORMATION FOR SEQ ID NO: 3353:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 59 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3353:

TAATCAACAC GAGGAGATGC TATTTAATGT CATCTGACAC AAACAGTTTA GCACATACA 59

## (2) INFORMATION FOR SEQ ID NO: 3354:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 59 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3354:

TTATGTAACC GACGAATGCT GCGATAGTGC TACGCCATCA CCGCCAGCTA ATCCGATTG 59

## (2) INFORMATION FOR SEQ ID NO: 3355:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 59 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3355:

TAACTATACC TTTAGGGTTA CTACCACGCT TAGGTAGGTC ATAACCTTTA ACCACATCT 59

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 59 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3356:

AATAACGCTA AACCTAAAAT GCTAAATAAT CCGCCGAACA ACATGCCGTT GTTTGTTGA 59

(2) INFORMATION FOR SEQ ID NO: 3357:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 77 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3357:

CCAGAACCAC CCACGCCCTT TGAATATGGG AACTCAAAAC GATCTACTGG CTGATGTAAT 60

TACCCCTGTT TTGATTG 77

(2) INFORMATION FOR SEQ ID NO: 3358:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 59 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3358:

AAGTTAGGTC TAGGGAACAT CGATAAATTA CCAGTAGTAA ATGCAGTTGA ACAACCAGA 59

(2) INFORMATION FOR SEQ ID NO: 3359:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 59 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3359:

CATGACCTTT AAATTGCATA TCTTCTGCAT CAGGTGCATC GCTTTTAACA ATAACGTCA 59

(2) INFORMATION FOR SEQ ID NO: 3360:



(A) LENGTH: 104 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1554:

10 TTTGAnATCA AATTCAC TTC GCAAACGTGT CCAAGCGTGA GCAAAGGGCT AGATGATTAA 60  
 TAGTTGCCCC ACTAACGGA TCGCCCCAGT TATCCAAC TT ATCT 104

(2) INFORMATION FOR SEQ ID NO: 1555:

15

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 100 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1555:

25 AATAAGAAAC AnGACACTAG CTCACCACGA CGCGCACGGC CTGCGTGTA AAATGTTGGT 60  
 GGCGCGGGTT GGAGATCGTG TTCAACCAGA GCAGAAAATA 100

(2) INFORMATION FOR SEQ ID NO: 1556:

30

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 86 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1556:

40 CAATGAAATT ATTTATTATT TTAAGTGCAT TAAACCCCGA TGATGGCTGT CCGGTACCAG 60  
 GTGCATTTTG GTGCCCATGG TTTACC 86

(2) INFORMATION FOR SEQ ID NO: 1557:

45

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 78 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1557:

55 GTCATGTTCC CATCAAACT AATTTGTACT TACTAAAGGC TCAGCAGCGC AACAAATTAGG 60

## (2) INFORMATION FOR SEQ ID NO: 1558:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 82 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1558:

AACTGGTTAC AGAAATACCA CGTTCTTGT TCAACTTTCA TCCAGTCACT TGATCGCAAA 60  
TTTACCAGTC TTCTTCCCTT TA 82

## (2) INFORMATION FOR SEQ ID NO: 1559:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 78 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1559:

CCACAGCGGC ACTATAGCCA GCCCCTAATA TATACAGTAT TTGCATCTGA CTCATTGGTT 60  
CATAAGTATA TGCAGTGA 78

## (2) INFORMATION FOR SEQ ID NO: 1560:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 76 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1560:

ACCATTTGCT AACTTTTTAG CAGCGCAATG TTCTTATTAA CTGCTTACGC CATCTATAAA 60  
AATAAACGTT CAACAA 76

## (2) INFORMATION FOR SEQ ID NO: 1561:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

TTGGAACCCA AATTTTTTTTA ATTTTCCCAA AAATTGGGGG GGGACCCCA ATTCCCTTAA 60  
 GGGTTTTTCCT TGGGGGCCCG GGGTTAATTC CACCCGGGGT TAAAATTTTC CCAAAAATTA 120  
 5 ATTTTnGAAA AGTTTTAATT TAAGGAAACC CATnGTCCG GAATTTTAC CCCATCCTTA 180  
 TGGGGGGTCC CAAAGATTCC 200

10 (2) INFORMATION FOR SEQ ID NO: 1562:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1562:

20 AACACAGAGA ATAACCAAGA GAAGACGTTT TCATCTGAAG AAAGTAACAG TAmGCCATTT 60  
 ATGGAAGAAA ATCAAAACGA TGAGATAGTT ATAAAAGAAG ATTCATATAA TCCATTTCGTA 120  
 ACGAAAACAT CTGAAAGTTT AATAGCTGAT GATGAATCTT CTGGTTATAA TAATACACGT 180  
 25 GAAAAAGATG AAGACTACTT CAAAAACAA CAAGAAATTT TACAAGAAAT GGATCAAACA 240  
 TTTGATTCAA ATGATGGTAC AACTGTGCAA AATTATGAGA ATAAAGCGTC TGATGATTAT 300  
 TATGATGTAA ACGATATTAA AGGAACAAAA AGTAAAGACC CTAAACGAGG AATTCCATAT 360  
 30 ATGGAATTGT TGGnCAGTCA TGGAACGTTA TTATTGCTCA 400

(2) INFORMATION FOR SEQ ID NO: 1563:

35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 454 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1563:

TCTTCATCAT CTTCTAATTT ACCAGCTGGA ATTTCTAGCA ATGGTTTTTC TACTGGTTTA 60  
 45 CGATACTGTT TCACTAATAC GACTTCTTTT TTAGGTGTCA CTGCACAAAC ArCAACTGCA 120  
 CCATTATGAT AAAC TAATTC TCTTGTTGAC GTTTCACCGT TTGGTAATGT CACTGTATGA 180  
 ATTTCTACAT CTACAATTTT GCCATTATAA ATAACTGTTC GATCAATTGT TTTTTCATTT 240  
 50 AAATCCATTA TAATCACGTT CCTTTAAATT CATATTATAT ATTGATACAC TATGCTTGTT 300  
 AGCTAAAGTG TATCGAAAGG AGAACAGACA TGCAAAAAAA TATATTAAAA AGTGGTATTT 360

55

AAATTATAGG ATTGTGCTGT TGAAAATGGG TATC

454

(2) INFORMATION FOR SEQ ID NO: 1564:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 69 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1564:

ACATCTCGCA TCGTCACGAC TTGCTTGAAC CACTAGCAGG TCAAACAAAG CTGTACAGGC

60

AACATCTGC

69

(2) INFORMATION FOR SEQ ID NO: 1565:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 117 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1565:

TCCAGAACCA TTTTAAATCC CGGGAAATAT AATTACCTCC ACTAAGTAA TATATCCAAG

60

CCAAGACTAA TCCTCCTTAA GCCGGTTTAA GTAACCAGGT TGAGAAGGAT TTTTGG

117

(2) INFORMATION FOR SEQ ID NO: 1566:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 103 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1566:

TATTGAGATT AACAGTCTGG GAAAAATGAA CAGCAATTGT nTAATGTGAC GATGCTGATT

60

ACTTTTAAAC AGTATCATTT AATAACTCAG AGATGCGCTT TAT

103

(2) INFORMATION FOR SEQ ID NO: 1567:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 81 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1567:

5 AATGGATGGG ACAGCAATTA GTGCATAACG ACAATATATG CTCAATTTGT CGGCAACTGG 60  
TTAAGAATCG TATTGTCACA A 81

(2) INFORMATION FOR SEQ ID NO: 1568:

10 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 80 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1568:

20 AATGGATTCA GTAGGTATTG GTGAAGCGCC AGACGCAGCT GATTTGAAAG ATGAAGGTTC 60  
ACATACTTTT AGCATACCTT 80

(2) INFORMATION FOR SEQ ID NO: 1569:

25 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 95 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1569:

30 TTTTAAATA CGATTTTAAG GAGGCCATTA TAATGGCGAG TAAAAGTAGC GAATTAATGG 60  
35 TTTTGGTTAG GAATTGGTCG TTTAGGCATT CAGGA 95

(2) INFORMATION FOR SEQ ID NO: 1570:

40 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 118 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1570:

45 CCCAATAAAA AAAGCCTGTT GTCACAATGG TCATAGACAC GTACATACTT TAAAGGTTTC 60  
50 TGTAATATAA ATATTTTATA TGCCACTTTA AAGTTGGnAC GTTCGTATGT TGTACTAA 118

(2) INFORMATION FOR SEQ ID NO: 1571:

55 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 104 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1571:

GACTTGATCA ATGAAGCATT GTGTGACAAT TGGTCTGTTT GCACACCGCA CGGATTGnGC 60

10 GTCATTTATT TGTACTAATT CAAAAACAT TGTGTTTTTC CTAG 104

(2) INFORMATION FOR SEQ ID NO: 1572:

(i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 118 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1572:

CCGAAGTGA ATGGTCCTAA TGTTTTACTC ATACCATATT GCGTAACCAT TGAGCGGCGA 60

25 TTGTGTTGCA CGTCGAGCAT TGAGACCGTT GTACTCGTAA nGTATATCTC TGTACACG 118

(2) INFORMATION FOR SEQ ID NO: 1573:

(i) SEQUENCE CHARACTERISTICS:

30 (A) LENGTH: 74 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1573:

AGGGATCAAA GGTCCATCCC CCATGCATTG GATAGTGGGG GATGACTTTT GATCCTATGT 60

40 TCCAGTTGCT TATT 74

(2) INFORMATION FOR SEQ ID NO: 1574:

(i) SEQUENCE CHARACTERISTICS:

45 (A) LENGTH: 341 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1574:

AACCTTTTGA GTAAATTCAC CAATACTCAT CCCCTTATCA TTAAACAAAC TTTTATTAAT 60

55 GTTTTTGGTT ATATTATGAG TCTTTACTGC TTTTAGATTG TAAAAATTAT CGTCATAAAT 120

GTAATTAATG TAATAATAGA AAAGTGATA TATCTCATAT CGCCACCTGC TATACAACCTT 240  
 ATTAAATAAT TAATTCCAAG ACATATTAAT TATCTAATTA TAACCTTAGT TnACGTTATT 300  
 5 ACATAATATA AAAATATATA ATAACCTTATC CnCCGGCnCC T 341

(2) INFORMATION FOR SEQ ID NO: 1575:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1575:

ACGTGTACCA ACTTTTGGGC ACCATTGATA ATAnGTGTCA TAGGGTGACT CAGCATAACG 60  
 20 GGCAAGCCTA TTAATGATAG CCAGATTAAG ACATACAGTA CATATGTTC 109

(2) INFORMATION FOR SEQ ID NO: 1576:

(i) SEQUENCE CHARACTERISTICS:  
 25 (A) LENGTH: 79 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1576:

GCTAGATTGC GGGAATTAAC AATCATCAGC GATTTAATAT TTGCACTGGA GACGTCATGG 60  
 35 TAATAAAAAA TTGATGAGA 79

(2) INFORMATION FOR SEQ ID NO: 1577:

(i) SEQUENCE CHARACTERISTICS:  
 40 (A) LENGTH: 69 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1577:

ATGATGGCTA TCATGAGATT GAGATGATAA TGACAACAGT TGATTGAAA TGATCGTGTA 60  
 ACTTTTCAT 69

50 (2) INFORMATION FOR SEQ ID NO: 1578:

(i) SEQUENCE CHARACTERISTICS:  
 55 (A) LENGTH: 104 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1578:

AAATTGTCAC TnCAGGTCAT AACCAACCAG GTGGGACTGC ACGAGCGTTA CTAATGATCC 60

10 AACGGTCTTG CTTTGTGATG AGGCAACAAG TGCATTGAT CCGC 104

(2) INFORMATION FOR SEQ ID NO: 1579:

(i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 89 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1579:

GCTCAATAGA TACAACTATT AGGACAACGG ACTATCGTTT ACAATTTATT CCAGATAAGG 60

25 ATCGCGCAGG TCGTATGCGT AACTATGCA 89

(2) INFORMATION FOR SEQ ID NO: 1580:

(i) SEQUENCE CHARACTERISTICS:

30 (A) LENGTH: 102 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1580:

TTGTCTCTAA TAATGGnTTT GGCTTTTTTCT AAAATTTTCAG ATGTGGGTGC TGGTGAAGCA 60

40 CCGACTGGTT AATTTTCTTG TCGTCACGGC CACTTTTTGT TT 102

(2) INFORMATION FOR SEQ ID NO: 1581:

(i) SEQUENCE CHARACTERISTICS:

45 (A) LENGTH: 102 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1581:

AAGGTGCTGT TATTAGGATA ATGnATTTTAA ACCCCATGGT ATGAAGGATA TCTGGAAGTT 60

55 AGATTGGATA TCCCTTAACC ATGGGGGGTT TTATTTTGG GG 102



(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 160 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1582:

10

TTCAGGGGAG CTGAACATAT TGACGACTTT TGGGTCAATT CATTTTGCAT TTTACTTTTA 60  
 AATGCGTTGT TGCATGTAAT TGTATTAACG ACATACATGG TGGGGCTCTA AATnAATGCT 120  
 TGACTAATTT CTTGGATGGA GACCACGATT TACCAACTCA 160

15

(2) INFORMATION FOR SEQ ID NO: 1583:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 348 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1583:

30

TAAAAGCAAG TACATTAGAG GTTAGATCAC AAGCTACTCA AGACTTGAGT GAATATTATA 60  
 ATAGACCGTT CTTTGAGTAT ACAAATCAGT CAGGATATAA AGAGGAAGGA AAAGTGACGT 120  
 TTA CTCTAA TTATCAACTT ATAGATGTAA CTTTAACTGG GAATGAAAAG CAAAATTTTG 180  
 GTGAAGATAT TTCTAATGTA GATATATTTG TTGTAAGAGA AAATTCTGAT AGATCTGGTA 240  
 ATACAGCTTC AATTGGTGGT ATTACTAAAA CAAAcGGTTC AAATTATATT GATAAAGTAA 300  
 AAGATGTAAA TTTAATAATT ACTAAAAACA TCGATAGTGT TACATCAA 348

35

(2) INFORMATION FOR SEQ ID NO: 1584:

40

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 73 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1584:

50

AGCCAGCAGT AGATAGATAT ATTAATGAAT TCTTGAGAGAA AGGTAGCTCA AATTGTCCAA 60  
 TTGAGATATT GAA 73

(2) INFORMATION FOR SEQ ID NO: 1585:

55

(A) LENGTH: 255 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1585:

10 GTAAGGAATG GTCACGTATT CCACACTTCT ATATGAATTA TTATGTATAT CAATACGCAA 60  
 mTGGTTACAG TGCAGCTCAA AGCTTAAGTC ATCAAATTTT AnCAGAAGGT AAGCCAGCAG 120  
 TAGATnGATA TATTAATGAA TTCTTGAAAA AAGGTAGCTC AAATTATCCA ATTGAGATAT 180  
 15 TAAAAAATGC TGGTGTAGAT ATGACAACAC CTGAACCAAT TGAACAAGCT TGTGAAGTTT 240  
 TTGAACAAAA ATTGA 255

(2) INFORMATION FOR SEQ ID NO: 1586:

20

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 25 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1586:

30 TTATTAGGTG AnTCCATTGG CAACATTGAT TGGTTTGTCA TTAGGACAAA TTTTATTATA 60  
 CATTGGCGTT ATTTTTACTA TCTTATCTGG TATTGAATAC TTTTATAAAG GTAGAGATGT 120  
 TTTTAAACAA AAATAAATAT TTGTTTATAC TAGATTTTCAT TTTCATATGG AATCTAGTTT 180  
 35 TTTTAATCCC AATTTTAGAA ATTAGCCACG CAATTGTTTA TAATGATATA TTGTAAAACA 240  
 ATATTTGTTT ATTTTTTTAG GGAAAACTG TAGTAGCATC TGATACATTG AATCTAAAT 300  
 TGATGTGAAT TTTTAAATGA AATACATGAA AAAATGAATT AAACGATACA AGGGGGATAT 360  
 40 AAATGTCAAT TGCCATTATT GCTGTAGGCT CAGAACTATT 400

(2) INFORMATION FOR SEQ ID NO: 1587:

45

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 561 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 50 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1587:

55 CAAAGCGTCT ATTATTGTTT GATTTTGATG AAACATATTT TAAACATAAT ACAAATGAAG 60

AAGTGATCAC TGCTGTATTG ACAGGAAGTA CATTTCAAAG TGTCATGGAT AAaATGGATC 180  
 AAGTTAATAT GACGTTTAAA CCATTACATA TCTTTTCTGA TTTGAGTTCT AAAATGTTCA 240  
 5 CTTGGAATAA TGGCGAATAT GTTGAATCAG AAACATATAA AAAGAAAGTC TTGAGCGAAC 300  
 CATTTTTATT TGAAGATATT GAAGATATAT TACGTCATAT TTCTGCGCAA TATAATGTCTG 360  
 10 AATTTATTCC ACAAAGAGCA TTTGAAGGTA ATGAAACACA TTATAATTTT TATTTTCATT 420  
 CAACAGGTAA TCACAACAAT GATAGTCGTA TCCTAGAAGC ACTnnTCAGA TACGCAAATG 480  
 ACCAAAATA TACAGCGAGA TTTAGTCGAA GCAATCCATT AGCTGGTGAT CCTGAAAATG 540  
 15 CGTATGATAT TGACTTCACA C 561

## (2) INFORMATION FOR SEQ ID NO: 1588:

(i) SEQUENCE CHARACTERISTICS:  
 20 (A) LENGTH: 79 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1588:

CCAACAGTTT TATCATTATG GCAAGTTCTG TTAAACCTGC TGAGAGTTAT TTTGCACTGA 60  
 30 TTGCAAAACC AGAAATTGG 79

## (2) INFORMATION FOR SEQ ID NO: 1589:

(i) SEQUENCE CHARACTERISTICS:  
 35 (A) LENGTH: 73 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1589:

GCAGATATGC AGCAATTAT AGAGGACTAG TAAACGCATA TATGACTTAC AGCTTTCAGA 60  
 45 CAAATAGCTT TGC 73

## (2) INFORMATION FOR SEQ ID NO: 1590:

(i) SEQUENCE CHARACTERISTICS:  
 50 (A) LENGTH: 71 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

55

TCATTTTATG GTTGATCATA GCGTCGTCT TTTTCCTTGG GGATTTTATC TTAAATACA 60  
CAGATTGGCG C 71

5 (2) INFORMATION FOR SEQ ID NO: 1591:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 78 base pairs  
 (B) TYPE: nucleic acid  
 10 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1591:

ATACAATACA ATTCACACCA TATATGGATA AAATGCAAGA TGCAATTACT GCAGTTGCAC 60  
AGTGCAAGTA GCAATACC 78

20 (2) INFORMATION FOR SEQ ID NO: 1592:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 168 base pairs  
 (B) TYPE: nucleic acid  
 25 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1592:

30 CCAATTAATT AAAAACCGGA AAACCAATTT TTAAACCAA TTAAGTTAAA AATTTTTTAA 60  
AATTGGGCCC CAAACCTTGG AAAAAGGTTT AATTTTCCTT TCCCAATTTT CCCAAAATTT 120  
35 TTAAACCCAA AAATCCCGG TTTGGGTTA AATTTCCCTn GGTAAAT 168

(2) INFORMATION FOR SEQ ID NO: 1593:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 117 base pairs  
 40 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1593:

TGCTAGAAAG TATAGAACCT GGTCAAACG CATGGTTTTA TGTCCTTTT TAAACnGATG 60  
50 TTTATTAAAA AAATATGGAA ATTGGCCACG TCCGCCAATT TCCTTAGAAA AGAACGT 117

(2) INFORMATION FOR SEQ ID NO: 1594:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 66 base pairs  
 55

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1594:

AGACGAAGCC AAAAAGTTAT TCGCCAAATC TGAAATATTT TCAAAGACCT TAAAGGCGTA 60

10

AAATAC 66

(2) INFORMATION FOR SEQ ID NO: 1595:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 100 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1595:

ATTTTATTTA GGCCAATAAC TGnCTACTTC TGAAATAAGT TGCTTTGCAT AGTCTGACGC 60

25

GGGATGTTTG GATAATATCT TCTGTGTTAT TGCATTGCAA 100

(2) INFORMATION FOR SEQ ID NO: 1596:

(i) SEQUENCE CHARACTERISTICS:

30

(A) LENGTH: 73 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1596:

GACCAGACGG CCGTAAACCT GGATGAAACC GTCCATTAGA TTCTGAAGTT GGTATTTTAC 60

40

CTAGAACGCA TGG 73

(2) INFORMATION FOR SEQ ID NO: 1597:

(i) SEQUENCE CHARACTERISTICS:

45

(A) LENGTH: 66 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1597:

CTTTATAAAA TTGTCTTTGA CTAACAGGAT TTTCAACGCT ATTACACAAAC CATGGTTTAA 60

55

CATATT 66

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 139 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1598:  
 TATGGCACCC TCTTTGATnT TGTGACCGTT TTTGGTAATT CACCATTATT GTACGAACCA 60  
 TGGAAATTCGC TGCCTTCCTT TAGGCAATAA CATAATTATA TTTATCCCCT TCTTGTCACT 120  
 AGAGGTGCTG ACAACACCA 139

(2) INFORMATION FOR SEQ ID NO: 1599:  
 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 101 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1599:  
 CTCCTCTGCA TGCACATCTT GTTGTAGCAA GGTTCACATG TAATTTATTA AATCGAAACT 60  
 CTATCCAACT ATGTTATAAA GTTCATTCTA AACAAATnAG T 101

(2) INFORMATION FOR SEQ ID NO: 1600:  
 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 172 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1600:  
 TTGTACCAAG GTTCACATGT AATTTATTAA AGCGAAACGC GTATCCAACT ATGTTATAAA 60  
 GTTCATTCGT AAACAAATAA GTATAAAAAT TCAATATTTT TATTACTAGA ATATGGTTAA 120  
 ATACATTTAT TTCTTATAAn AATTTGATGT TTAAGATATT TTGCCAAATT GA 172

(2) INFORMATION FOR SEQ ID NO: 1601:  
 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1601:

5 TTGGCACTGG CCGTCGTTTT ACAACGTCGT GCACTGGGAA AACCAAACA CGACGTTGTA 60  
AAACGACGGC CAGTGCCAAG CTTGCATGCC TGCAGGTCGA CTCTAAGAAG GA 112

(2) INFORMATION FOR SEQ ID NO: 1602:

10 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 679 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1602:

20 TGCAATGGTT AATCATCTCA TATAACAACA CATAATTGT ATCCTTAGGA GGAAAACAAC 60  
ATGACAAAAC ATTATTTAAA CAGTAAGTAT CAATCAGAAC AACGTTTCATC AGCTATGAAA 120  
AAGATTACAA TGGGTACAGC ATCTATCATT TTAGGTTCCC TTGnATACAT AGGCGCAGAC 180  
25 AGCCAAACAAG TCAATGCGGC AACAGAAGCT ACGAACGCAA CTAATAATCA AAGCACACAA 240  
GTTTCTCAAG CAACATCACA ACCAATTAAT TTCCAAGTGC AAAAAGATGG gCTCTTCAGA 300  
GAAGTCACAC ATGGATGACT ATATGCAACA CCCTGGTAAA GTAAATTAAAC mAAATAATAA 360  
30 ATATTATTTT CAAACCGTGT TAAACAATGC ATCATCTCTGG AAAGAATACA AATTTTACAA 420  
TGCAACAAT CAAGAATTAG CAACAACGTG TGTTAACGAT AATAAAAAAG CGGATACTAG 480  
AACAATCAAT GTTGCAGTTG AACCTGGATA TAAGAGCTTA ACTACTAAAG TACATATTGT 540  
35 CGTGCCACAA ATTAATTACA ATCATAGATA TACTACGCAT TTGGAATTTG AAAAAGCAAT 600  
TCCTACATTA GCTGACGCAG CAAAACCAA CAATGTATAA CCGGTTCAAC CAAAACCAGC 660  
40 TCAACCTAAA ACACCTACT 679

(2) INFORMATION FOR SEQ ID NO: 1603:

45 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 85 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1603:

CATTTTAATT GATATAATT AGACTTTAAC ATTTTCATGCT GTTCACGGTT TTAATTTGAG 60  
55 ACGTCAATTTG GTATAACAAC TATAC 85

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 68 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1604:

ACTGGTGTGA ATAGCTCCAG CAATTTCTTT AACCGCGATC ATAATCAACG TCACCTTTTA 60  
 ATTTGCCA 68

(2) INFORMATION FOR SEQ ID NO: 1605:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1605:

TGGGGGGTnT TTTTGGGTTG GGTAAAAAA AGGGAATTGG CCCAAGGGGG GAATTCCCTT 60  
 AAAAAAACCC CCAACCCCCT TGGGAAATTA AAAATTGGGT TAACCGGGA 109

(2) INFORMATION FOR SEQ ID NO: 1606:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 112 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1606:

GCTTATATAC ATGTTCCATT ATAAAAGGAG TACGAACGAA AGTAACGCAT GACGTTAATT 60  
 TAAAAATATT GTAATAATTA TGGATTAAAT TAAAAACCA GGGGTATTCC AT 112

(2) INFORMATION FOR SEQ ID NO: 1607:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 106 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1607:



GTTCAAGTTG GTAACCTAAC AACACGnAAT TAGTTTAAAC GTTTGG

106

5 (2) INFORMATION FOR SEQ ID NO: 1608:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 83 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1608:

15

CACACTGATA CCATAGGATT TATGATAGAT CAACAGCATG ACCAAATGTA TGACCTAAAT

60

TTAAAAATTT ACGTACACCT TGT

83

20 (2) INFORMATION FOR SEQ ID NO: 1609:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 132 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1609:

30

AAAAGAATAA AGTCACTGAA CAATGGTCTT TCACAATGAT GTTGCCTCAA TGCACAAGCG

60

CATTATGThT GTGACTTGGG CATTTTGGCT TATCAGCTGA ATATTATACG CATTACATC

120

CCAATTAACG TA

132

35

(2) INFORMATION FOR SEQ ID NO: 1610:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 107 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1610:

45

TTTAATGCAT ACGCTTCTCG CTTAGCAATT TCTTTGCACG TCTAACAAGC ATTAACGCTC

60

TTAnTACTAT AATCACAACA AAACCAGCGA AATATAACAT GCGTATA

107

50

(2) INFORMATION FOR SEQ ID NO: 1611:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 84 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1611:

5 TTCGCACCTG GTATCGTTCA AACCACCAAT GATGGCCCGT CTCGCCGTGG CAACAGCCGA 60  
AGACCGCAGG TAAACCCTGA ACGC 84

(2) INFORMATION FOR SEQ ID NO: 1612:

10 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 127 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1612:

20 ACTCACATGT ACGATAACAC CCTTCGTAAA TCCATCTTTG GTTTGCCAAG TTCGTCGTTG 60  
TAAACTGTCT ATACTCGTTA AACCGCTACA TGTTTTCTTA AAnCCTGTGC CTAAATGCTT 120  
TACTGAA 127

25 (2) INFORMATION FOR SEQ ID NO: 1613:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 129 base pairs  
(B) TYPE: nucleic acid  
30 (C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1613:

35 CGTTCAACTT TTTCAATTTT TAACGGCGTT TTAATATCTT TATCTGTAAC TAATTCAACT 60  
CCAAACATTA AGCCTCGTCC TCTTACATCA CCAACATTTT GATGACGCTT CAGCGCATGT 120  
40 AACTGTTTC 129

(2) INFORMATION FOR SEQ ID NO: 1614:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 348 base pairs  
45 (B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1614:

nCAACTAGTG GATTTAAnAT AnACATAATT ATAAATGCAA ATGCTAATAG CTGAATACCC 60

55

GCACTAGGTG CATAATTTGT GTATTGAGCA AATAAAGCTA ATACAATGAT TGTAATTCCT 180  
 TTAATGACAA ATAAAGGTAA ATTTAATCGT TTAAAGGTT GGTAAATTAA AAATACAATT 240  
 5 GCAGCTATAT GCGAGCCACT AACTGCCAGC AAATGATATA TACCTATCTC TTAAACACGT 300  
 TCCTTAAATT GCTCATTAAC TTCTTTTACG TCACCAGTAA TCAATGCC 348

(2) INFORMATION FOR SEQ ID NO: 1615:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 72 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1615:

20 GAGCTCCACC GCGGTGTCGC CCGCTCTAGA ACTACTGGAT CCCCCTGGCT GCAGGAATTC 60  
 GGCACAGCAT AT 72

(2) INFORMATION FOR SEQ ID NO: 1616:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 63 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1616:

35 CATCACGTTA AATCATAACG CGTGACGTC TTTTGCTATT TGTCTCTCGG TATCTCTATA 60  
 TCT 63

(2) INFORMATION FOR SEQ ID NO: 1617:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 113 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1617:

50 ATTGAATTCA AGGGTGGAAAC TCATGAATTG GCTGGAAAAA GGTAGATTTA ACTGGATGGT 60  
 TGNAGCCATA TATCGGTGCG TTTATTATT TGGTATTTTA AAAATCAACC TCG 113

(2) INFORMATION FOR SEQ ID NO: 1618:

(A) LENGTH: 80 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1618:

10 GTACAATAAA GTGGTAAACA ACATGCCAAT GGAAAAAGGG ATTAAAGGTG TTTATGTCAT 60  
 TCTTAAAGAT AGTAACGGTA 80

(2) INFORMATION FOR SEQ ID NO: 1619:

15

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 117 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1619:

25 ATCTTATGTT TTTTTCCTAA AACTTCTGCT ACTTCATTTA TTTGATGTAT GGTAGATAAT 60  
 TCTGTTTGGA TACTCATATC AACTTTTTCT ATCATATCTG AAATCTCTTT TnTGGCA 117

(2) INFORMATION FOR SEQ ID NO: 1620:

30

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 107 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1620:

40 CGATAAACCC TTCGTAATCA ATCTTTGGTT TGCCAAGTTC GTCGTTGTAA CAGTCTATAT 60  
 CGTTAAAAGC TACATGnTTT CCTAAGCCTG TGCCTAATGC TTTACTG 107

(2) INFORMATION FOR SEQ ID NO: 1621:

45

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 63 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1621:

55 AATATCGTGT CTCTGTCCAG TGCTGTCCAA TCAATTTTGA TCCACCGATT GTCATACGTA 60

## (2) INFORMATION FOR SEQ ID NO: 1622:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 75 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1622:

ACCATCTGAC ATCATCAATT ATGAATTAAT GATGATATTA AAAATAAATT TGAAACATTG 60  
CCAATTGATA GTGCC 75

## (2) INFORMATION FOR SEQ ID NO: 1623:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 78 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1623:

TACCTGTGTA TCAGCTCTAT TAACAACCTA ACATATGTGA ATAATTTGCG ATCCTTGTTG 60  
ATAATGCTGT AATTTGAC 78

## (2) INFORMATION FOR SEQ ID NO: 1624:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 95 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1624:

GCAAGCTTTT GCGGCTTCTG ATGCACCATT AACTTCTGTA ATTAAACACA CAAAGTGAAA 60  
CAGGTAGGTA ATGCAAAACT GCAACGGACA ATCGA 95

## (2) INFORMATION FOR SEQ ID NO: 1625:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 76 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

ATTGCGATTA CACAGTAGTG AATGAGATAT TTGACATGAA AGCTCCTGCA GCTTCTAAAG 60  
AAGAGTTAGC AGGTTT 76

5 (2) INFORMATION FOR SEQ ID NO: 1626:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 126 base pairs  
(B) TYPE: nucleic acid  
10 (C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1626:

15 AAAAGCTAAA AAAGATTATC AGGTGTATCA CAAACTCAA TTCTCATTAC CATTTATCTC 60  
AGTGTGAACG TCTTAATTGA GAACTAATCT NAATTGAGAT ATTAGTCATA TAAGGATGGA 120  
20 CAAGCA 126

(2) INFORMATION FOR SEQ ID NO: 1627:

(i) SEQUENCE CHARACTERISTICS:  
25 (A) LENGTH: 116 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1627:

30 TGATACGATA GAACATAGTT CAGCACATTG TTTGTTGAAA TTGGATATTA CCGCCATTTT 60  
35 TTCACAATAT CAATAATACC TGAACGTGTT GGTtntTCCA CATTATGATT GTACAT 116

(2) INFORMATION FOR SEQ ID NO: 1628:

(i) SEQUENCE CHARACTERISTICS:  
40 (A) LENGTH: 91 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1628:

45 ATTTTGTCTT ATCTTGAACA AATCCGATTT TTCTCAGACA CTGAATCCAA AGTATTCATG 60  
50 TACCATAAAC CATCTGCATG TTGATTTATG C 91

(2) INFORMATION FOR SEQ ID NO: 1629:

(i) SEQUENCE CHARACTERISTICS:  
55 (A) LENGTH: 400 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1629:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| ACAGAAAGTC | AAACAGTAAA | AGCGGCAGAA | TCAACTCAAG | GTCAACACAA | TTATAAATCG | 60  |
| TTAAAATACT | ACTATAGCAA | GCCAAGTATA | GAGTTAAAAA | ATCTTGATGG | TTTGTATAGA | 120 |
| CAGAAAGTGA | CAGATAAAGG | AGTATATGTT | TGGAAGGATC | GAAAAGATTA | TTTTGTTGGC | 180 |
| TTGCTTGGTA | AAGATATTGA | AAAATACCCT | CAAGGTGAGC | ATGATAAGCA | AGATGCATTT | 240 |
| TTAGTCATCG | AGGAGGAAAC | TGTTAATGGA | AGACAATATT | CAATTGGTGG | TTTAAGTAAG | 300 |
| ACAAATAGTA | AAGAATTTAG | TAAAGAAGTC | GATGTTAAAG | TAACAAGAAA | AATTGATGAA | 360 |
| TCATCGGAAA | AGTCTAAAGA | TAGTAAATTT | AAAATTACTA |            |            | 400 |

20

(2) INFORMATION FOR SEQ ID NO: 1630:

|                               |
|-------------------------------|
| (i) SEQUENCE CHARACTERISTICS: |
| (A) LENGTH: 400 base pairs    |
| (B) TYPE: nucleic acid        |
| (C) STRANDEDNESS: double      |
| (D) TOPOLOGY: linear          |

25

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1630:

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| GCTTTCCTTT | TCGAAATCTA | TAAATCTAAT | CCATTGAAGT | AAACTAATTA | TGATAATTAT | 60  |
| TAATTCTATA | ATTGTnGTTA | TCTTTAAATA | ATTTGGAAAC | CTTTCATAAT | CTAAACCAAA | 120 |
| AAAGAAAGTT | AGACATGAAA | AAAGTATCAT | AAATAATGAT | GCTAAACTTA | AGGCTTGTGC | 180 |
| ACCTGGCTTT | CGAAGAATGT | CTATATTTTC | CTTAGTAGTC | ATATTTACCT | ATCTCCTATA | 240 |
| CATTGATTTT | GTAATAGCAT | ATTAAGTATT | TAAAGTTATA | AGTACTTAGA | TTCTTTTCGA | 300 |
| TTAAAAGTAT | AAAAGCCTAA | AATTATCTTT | ATATTATTAT | TTGATGACAA | CTTTATGGTC | 360 |
| TCTATTGTTT | TTTACTTAAA | CGCTAAAAAG | CTAnACAAAG |            |            | 400 |

45

(2) INFORMATION FOR SEQ ID NO: 1631:

|                               |
|-------------------------------|
| (i) SEQUENCE CHARACTERISTICS: |
| (A) LENGTH: 70 base pairs     |
| (B) TYPE: nucleic acid        |
| (C) STRANDEDNESS: double      |
| (D) TOPOLOGY: linear          |

50

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1631:

TCTAGAGCGA

70

(2) INFORMATION FOR SEQ ID NO: 1632:

5

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 62 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1632:

15

CAACGAAGAT ATTCAAGTGT TCAGTCATTA TTTTGTACTG CTAATGAAAC TGATTCTTGT

60

GG

62

(2) INFORMATION FOR SEQ ID NO: 1633:

20

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 81 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1633:

30

CTAATGATTA GATTCAAAC AATAAAGACT AAAAAACAA GTTGATAATG GTAAAGATAT

60

TATCCAACCTT GACATCTAAA G

81

(2) INFORMATION FOR SEQ ID NO: 1634:

35

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 63 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1634:

45

AATTCACCT TTGTCTAGTA ATTTATTTGT GTAGTGTAAT CATTAAATTGT TTTAATATCT

60

AGT

63

(2) INFORMATION FOR SEQ ID NO: 1635:

50

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 579 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

55



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1635:

ACCAACTAGC TAAATGCCAG CGCGGhATCC ATCTCAhAAG TGCACAGCAA GACCGTCTTT 60  
 5 CCAACTTTTG AACCATGCGG TTCAAATAT TATCCGGTAT ThAGCTACGG TTTCCCGAAG 120  
 TTATCCCACT CTTATAGGTA GGTATCCCC AGTGTTACTC ACCCGTCCGC CGCTAACATC 180  
 CAGAGAAGCA AGCTTCTCGT CCGTTCGCTC GACTTGCATG TATTaGGCac GCCGCCAGCG 240  
 10 TTCATCCTGA GCCAGGATCA AACTCTCCAT AAAAAATTATG ATGTTTGATT AGCTCATAAA 300  
 TACTAAATAA TGTTTGTAAC TAATAGTTAC GTTTTTGGAA TTAACGTTGA CATATTGTCA 360  
 15 TTCAGTTTTC AATGTTCAAT AATGTTCAAT CTCTTTTATT CTACTTCATT TATTTCTTGA 420  
 AGTCAATAAC TTTTGAACG ATTACTTTAT TTATTCTATA TTGTTTTTAT AGTTATTICA 480  
 ATGGtAAGTh TTACACTTTT GaaATTCTTC TTAAAAACA ACTGCGTCGt TTTTGaCGeT 540  
 20 TTATCaTATT ATChACTTTG GGaATTTAAA GTCAATAAC 579

## (2) INFORMATION FOR SEQ ID NO: 1636:

(i) SEQUENCE CHARACTERISTICS:  
 25 (A) LENGTH: 69 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1636:

TCGACATTAA GCAACGTTCT TCGCAAAAGG TAGCGAGCGA CACGAGTTAA CTTTGACAGT 60  
 35 TTCATTATT 69

## (2) INFORMATION FOR SEQ ID NO: 1637:

(i) SEQUENCE CHARACTERISTICS:  
 40 (A) LENGTH: 116 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1637:

CTGTGACTTC GTCGCGATGA CCTTCGCCGT TGTTCTCATG GTAAGCTTTA AGTATCGTCG 60  
 50 ATGCAGTCnG TTCGCCATGT GCGCCAGCAG ACTGGTTGTA ATGTCGCCTC GTCCGT 116

## (2) INFORMATION FOR SEQ ID NO: 1638:

(i) SEQUENCE CHARACTERISTICS:  
 55 (A) LENGTH: 71 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1638:

ACAACATTTA GGTACTTTCA CGCATATCAC TACAGCTCAA CGTGATGATT TACCAAATCA 60  
AATTTACAAA G 71

10

(2) INFORMATION FOR SEQ ID NO: 1639:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 73 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1639:

GCGTGGCTTT GTGATTAAACA TTGACAAGCA CGTGCAACAA CATATTCGAC GCGATAAAGC 60  
GACATCTAAT ATT 73

25

(2) INFORMATION FOR SEQ ID NO: 1640:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 400 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1640:

CGCGATCATT TTCATTTCTA ATTAATCTTC CAAGTCCTTG TCTAAAACGT GTAAGTGCAT 60  
CAGGTAATAC ATATTCCTTG AAAGTTGAAG TGAATTCAGA ATCCATAAGC CAATATTTTG 120  
CATTATGCTT GTTCATAAAC GGTAACCTCG CTATCATCAC ACATTTAATA CCATTTGCTT 180  
GAAAATCAAA ACCTTCAAAA AATGTTGACG TACCAAGCAG TATGGCCTTA TCAAAATTAT 240  
TAAACTGTTG TACTATTTTA TAATTTTGGT TCTGCTGTTG TGTTAATACA ACATAATCTT 300  
CAAATCTGCG CAATTCATTT AAGCATATCT TGTACCATAT GCATCATTTT ATAAGTCGTA 360  
AATAAGACTA AACATTTTGA TGACGTTATA GTCGTATATn 400

50

(2) INFORMATION FOR SEQ ID NO: 1641:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 66 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

55

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1641:

5     ATTGTTGTAC CATGTATACT AACAAATTGTA ATGTCTCATT TCAGTAAACA AAAAGCGAAA     60  
       GACATT     66

## (2) INFORMATION FOR SEQ ID NO: 1642:

10     (i) SEQUENCE CHARACTERISTICS:  
        (A) LENGTH: 400 base pairs  
        (B) TYPE: nucleic acid  
        (C) STRANDEDNESS: double  
        (D) TOPOLOGY: linear

15

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1642:

20     ATTTCGTCGG GAATAAATTT TGCCATTACA TAGAAATATC TAATAGATAA CGAAAAAGTA     60  
       TCGTATGTAT TTTTAATATA GTGTAAAATA TTATATGTAA AATAAAATGT AGGTTTTTTAG     120  
       TTAGAGGCAT TATAAGAnAA TTTTGAGTAT AGGTTAGCTT TTAATTATGA ATCTTATTGA     180  
       AATTTGATTA ATAAAAATAT GATAGGGGAT TAAATGAAA CTATTTTATA TCGTATTTCCT     240  
       TATTATTATA TGGCTGAATA TATTTTtagg AAATGAAATC ATCCATACAC TGA CTGTTTTT     300  
       AATAACAACA TTGTATATTG TTAATTCACG AnAGGGGATT AAAAATGACA GAGTTGAATA     360  
       ATATTATAAA CGCGCnTGCA ATCnTTGTTT GAGTCCGGAA     400

## (2) INFORMATION FOR SEQ ID NO: 1643:

35     (i) SEQUENCE CHARACTERISTICS:  
        (A) LENGTH: 66 base pairs  
        (B) TYPE: nucleic acid  
        (C) STRANDEDNESS: double  
        (D) TOPOLOGY: linear

40

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1643:

45     AACTAGAGGA GGACATCCTA ATGGAAGCAA AACCCGTTGC TAGAACAATA AGAATCGCAC     60  
       CTCGTA     66

## (2) INFORMATION FOR SEQ ID NO: 1644:

50     (i) SEQUENCE CHARACTERISTICS:  
        (A) LENGTH: 75 base pairs  
        (B) TYPE: nucleic acid  
        (C) STRANDEDNESS: double  
        (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1644:

5 TATCAATTTT ATATGCGATT TGGCCTTGCA ATAATTAGGT CTCACCTTGC CATATCTTTA 60  
CCTAAGCAAT ACTTG 75

(2) INFORMATION FOR SEQ ID NO: 1645:

10 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 70 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1645:

CATTCTCCTG CATCATAAAA ATCAACAATT GTATCATCAA AGTGTATCAA AATATTTTAA 60  
20 TATCCCAATT 70

(2) INFORMATION FOR SEQ ID NO: 1646:

25 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 73 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1646:

AGTGACACTT TCGTTCCACC ACATCGTAAA GAAGTACTTC AAGCACGTGA AGATGACATC 60  
35 AAAGAAAAAG TTG 73

(2) INFORMATION FOR SEQ ID NO: 1647:

40 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 71 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1647:

CTGTGATTGG TGTGTGATT GTCTTGCTTC CTGTTGTCC TTCTTGTTC GCTCGCTCTT 60  
50 CGCCGGGTTG T 71

(2) INFORMATION FOR SEQ ID NO: 1648:

55 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 115 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1648:

AACTATAGAA AAATTCGGAA TTATACCAGA AATGGAATAT GAAATGGAAG AGGTTAAACA 60

10

AAACGAGCAA TATATTAGAG AGCAAGAAGA AGCTGGAACA ATAGAGGCGA TAACA 115

(2) INFORMATION FOR SEQ ID NO: 1649:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 59 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1649:

TGTTGTCATG ATCTGAAAAG TCAAAGTCAA TAGAACATTG GCTTTGGCTT TTTATTG 59

25

(2) INFORMATION FOR SEQ ID NO: 1650:

(i) SEQUENCE CHARACTERISTICS:

30

(A) LENGTH: 125 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1650:

35

ACCGATAATA GTACACGGCA TAATGnAACA ACTTGGCATG CACCCTTTT ACGTTCTTTT 60

ATCTCTGCAT GATTGTCATG TTCATCATGG TTTGGCTTGC ATTAATAGAG AGGGTTGACG 120

40

CAGAA 125

(2) INFORMATION FOR SEQ ID NO: 1651:

(i) SEQUENCE CHARACTERISTICS:

45

(A) LENGTH: 71 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1651:

TGATTAACGC GAATGCCACT TTTACTACCA ATGTTCCCAA AGCTGCTTCT GACAAACGCC 60

55

ATTGTACTCT G 71

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 60 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1652:

TCACTACATG CACCATAAAT ACAGTATGAA CGTATTGAAA TGGGCATTAC ATGATACAGA 60

(2) INFORMATION FOR SEQ ID NO: 1653:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 123 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1653:

TTAATTGAAA CAATTGACAA ATGCAATTTG ACGCCAAACT TTGAACTTTG AATGGATTAT 60

CACATTATGA TTGTTTCATCC ATGGnCAATT AGCATGGACG TATTACATTC TGGATTATCA 120

AGC 123

(2) INFORMATION FOR SEQ ID NO: 1654:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 76 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1654:

CTATGACGTC GCATGCACGC GTAACCTGGG CCCCTCGAGG GATCCTCTAG AGCGGCCGCC 60

CTTTTTTTTT TTTTTT 76

(2) INFORMATION FOR SEQ ID NO: 1655:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 145 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1655:

TTTTAAATTT TCGTGAAATC GGAAATGTAC GATTAGTTAT TAAGCGTTAG AATGTGTGAT 120  
ATGTGAACCT GGTATTGACG GCGCT 145

5 (2) INFORMATION FOR SEQ ID NO: 1656:

10 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 73 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1656:

TTTAGAATTC CAATACGCTA TTGCCAGCGA TTTAGCCACT TGTGGGTAAT GATATTGAAG 60  
GTGTTAGTCA AGT 73

20 (2) INFORMATION FOR SEQ ID NO: 1657:

25 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 93 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1657:

CTTCTGAAAA GTAGTAATGT AACCTATTGG ATGCGAATGA ATCCCCAAAT TTAGTGACG 60  
TATGTGGCTT CATCTTCAGA ACCTGTATCT GGT 93

35 (2) INFORMATION FOR SEQ ID NO: 1658:

40 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 58 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1658:

AAGTTAACAT GCAAGTTGAC GATGTAATGA CTCAAAAAGA GTGGAAACAA AAACACGA 58

(2) INFORMATION FOR SEQ ID NO: 1659:

50 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 65 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1659:

TTAATCCAC AAACAAATGT ATGAAATTGA GTCAGTGATA TTAAATATGG GCTTGAAAGT 60  
 5 GTCTA 65

(2) INFORMATION FOR SEQ ID NO: 1660:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 91 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1660:

TGCATTTTGT TAAGAACGCA AAGCATTGTA AATTAGTTTT TATAAATTAG GATATTATCA 60  
 20 TGTGTATTGA AAACAATGAA GTGTGCTATG A 91

(2) INFORMATION FOR SEQ ID NO: 1661:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 60 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1661:

ACATATCTGT CCACACAACA AGGACCATTG GTCTGAAGGG ACAGTGAGTG GGAATATGT 60

(2) INFORMATION FOR SEQ ID NO: 1662:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 169 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1662:

TGGGGTTTTTA ACCAGGGGAC CTAAAACCAG CCCCCATTTT CCAAGTTTGG ACCCCAAATT 60  
 CCCnAAATTT AAAAAAAATT TGTTTGGGGT CTAAGTTGGG CCGGTGCCTT CCTGCCTAAA 120  
 50 TTTAGCCCAT GTCTAACATA GTACTTTGGG AACGTAAAAG TTAAATTTA 169

(2) INFORMATION FOR SEQ ID NO: 1663:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 677 base pairs



(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1663:

|    |                                                                    |     |
|----|--------------------------------------------------------------------|-----|
|    | TGGCACAATT GCACCAATTA AATGAATAAC TTTATCATTT TTATATACAG GTACAACAAT  | 60  |
| 10 | CGCTTCTTTT ACGAACTCAG ACTGGCGTAA TTGTGTTTCA ATTTCTTCTA ATTCCATTCT  | 120 |
|    | GTAGCCATTC AATTTGATTT GGAAATCAAT ACGACCTTGA ATGAACCATT GACCATTTTC  | 180 |
|    | AAACTTCGCT TTATCACCAG TGTGATATGT ACGAATACCG TCATCGAAAT TAAATACTTC  | 240 |
| 15 | AGCTGTTTTT TGGTCATTTT TTAAGTATCC TAAACTTACA CTTTGACCTT CGATAACAAG  | 300 |
|    | TTACCTTCA TCTGTAGTAG ATAATCTTGC GCCTGGTCTT TCAACGCCAA CAGGTAATGT   | 360 |
|    | CGGATATTGA TCTAAGATTT CTTGTGTAAT TTGAATACTT GTAAGTCTA CCGTAGCTTC   | 420 |
| 20 | AGTTGGACCA TATGTGTTGT AAATCGTCGC ACTTGGGAAA CGGTTTACTA ACGCTTTTGC  | 480 |
|    | TGCTCTGTGA GGTAGAATTT CACCACAGAA GAAGAATTCG TTAAGACTAC CATATTGTTC  | 540 |
| 25 | TTCATTAAGC GTTGGAATA ATAAACACAT TTCCATAAAT GATGGTGTG ATACCCAAAT    | 600 |
|    | GTTAATCGGT GTTGCTGTTA GCATTTTCATT TAATAATTTA GGTTTATTAA TCATGTTTTT | 660 |
|    | ATCTACAAGA nTnAAnG                                                 | 677 |

30 (2) INFORMATION FOR SEQ ID NO: 1664:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 62 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1664:

|    |                                                                   |    |
|----|-------------------------------------------------------------------|----|
| 40 | GTTACAACAA TAGTGGTATA AAACGGGAGC AATTAGAGAT CAATATATGA TTATTAAGAG | 60 |
|    | CA                                                                | 62 |

45 (2) INFORMATION FOR SEQ ID NO: 1665:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 342 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1665:

55

GTTTACGCAA ATGATAGCTC GGTAACAT GAGCAACATG TTGAAGCCAA TTTGGAAATG 120  
 TGTTTATCGG AAACCACAAT CCACCTAATA CTGCTAAACC AATTGTTACG ATATTAGCTA 180  
 5 AAGCACTTGT TTTTGAATA TCATTTAACA AAGAACCATA ATATGCCAAA AGTTATTAAT 240  
 AGAGACGCAC CTAACCATAA AAATATTCCT GACTCTAACC ATTGAACTGC ACTCATTGCA 300  
 ACACCTTTAT AAAAATGTCC AACCATAAAA ATAACTAATA TC 342

10 (2) INFORMATION FOR SEQ ID NO: 1666:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 102 base pairs  
 (B) TYPE: nucleic acid  
 15 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1666:

GTCCAAGAAT TCAAAAACGT TTTCAACTTC GGCCAAAGCC CAATTTnTCT TTGTGGTTTA 60  
 ACTTTTAAAT TTTGAACGTT TTAGGGCATA AAAAAAAAAA GG 102

25 (2) INFORMATION FOR SEQ ID NO: 1667:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 122 base pairs  
 (B) TYPE: nucleic acid  
 30 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1667:

TTGATAGTAG CCATAATCAT ACCACTTAAA TAATATGTTT GATCATCGGC ATAATTTTTA 60  
 TTTATTGTCT GTTCGCAATA TTTTGAGCAT TATCATAATT ACCACTAGTC ATATCATCTT 120  
 40 TG 122

(2) INFORMATION FOR SEQ ID NO: 1668:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 57 base pairs  
 45 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1668:

AGAGATGAAA TTAATTCGC AATTGAAAAT TTCAAATCAC GATGAGAGTG GGACAGA 57

55

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 70 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1669:

10

AACTACTGCC AATATTAATA GCATTGGTAC ATCTTAGAGG CATTGAATTC CTTACTCAGA  
CTCATAATGC

60

70

(2) INFORMATION FOR SEQ ID NO: 1670:

15

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 73 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1670:

25

TTGTCTGATA TAATCCATTT CGATTGGACT CCACACGTTA CACCGATACC TTCTTTACCA  
GCCCGACCCG TAC

60

73

(2) INFORMATION FOR SEQ ID NO: 1671:

30

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 140 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1671:

40

GAAGAATTGT ACTGTTAAAG TGA CTCTAAA CTATCGCGGA AATAACAGTG AAATCACCAA  
TTAGACTAGC GAACTGAAG TCATTAAAAA CAGACATTTG TAGTGGTGCh CTTATCACCG  
CAAATACAAG AGAGTTTCTC

60

120

140

(2) INFORMATION FOR SEQ ID NO: 1672:

45

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 59 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

55

AACAACGTTT ACTATTGGCA CAGAACGGTT GGTACTTAGT CTAATACCAT TGTCATCAA 59

(2) INFORMATION FOR SEQ ID NO: 1673:

- 5 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 124 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 10 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1673:

15 ATCTCTTTGA CTTGAAGGAT TGGATTTAAA TCTTGGTGAT TTGGGCCGTG AAATATTTCC 60  
 AGAAAAATTCC TCAGACGTAT TAGTATAATT GTAACGnTAC ATTCTAATAT ACCTTTCTTC 120  
 GATG 124

20 (2) INFORMATION FOR SEQ ID NO: 1674:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 25 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1674:

30 CACCACCACC ACACACACAC ACACAAACAC ACAACCCCCC CACACACAAA CCACACCACC 60  
 AACACACCAA CACAnCACAA AAACCCACCA CACACACCAC ACACCAACC 109

35 (2) INFORMATION FOR SEQ ID NO: 1675:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 101 base pairs  
 (B) TYPE: nucleic acid  
 40 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1675:

45 TnGTCAACTG ATTTATGAAA TGGCAGAGCA TATGGCGTCA AAGGTTCTTA ATCGTTAAGC 60  
 CAGACCACTG GAGGACCATT AGATGCAGCG TTGCTTTCAA G 101

50 (2) INFORMATION FOR SEQ ID NO: 1676:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 55 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1676:

|    |                                                                    |     |
|----|--------------------------------------------------------------------|-----|
|    | TTTTTAAAT TTGnAAATTT TAGACCTTAT TTCACGTGCG ATTTAATCGA TGTGTTAATA   | 60  |
| 5  | AAACAATACT GGCATTCAAC ATGTAATCCG ATAATAAAAT AAGGTTGCAA TTATGTTATT  | 120 |
|    | GCATATTTTG TTTATTACTT AGAATAATAC GATGGTTAAG ATGAAATATA TGACAAAGAT  | 180 |
| 10 | AAATAATGAC ATTAAATTCA AGATGTTTAC GCCTTTTAGA TCTTTTTTAA GCATTTTAAA  | 240 |
|    | TCCTGTCACT TCKACATTAC CGACTAAGAG TAATAAGACG ATAAATACCC ACCAATTsTC  | 300 |
|    | TTTTGGAAAA CTCATCGTCG TTAATGCTAA GACGAATAAT AACAAACACAC CCATAATAAT | 360 |
| 15 | TCTCAAAATG CGAGTAAATA CAACTTCCAT TTTAAAAATA                        | 400 |

(2) INFORMATION FOR SEQ ID NO: 1677:

(i) SEQUENCE CHARACTERISTICS:

|    |                           |
|----|---------------------------|
|    | (A) LENGTH: 64 base pairs |
| 20 | (B) TYPE: nucleic acid    |
|    | (C) STRANDEDNESS: double  |
|    | (D) TOPOLOGY: linear      |

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1677:

|  |                                                                   |    |
|--|-------------------------------------------------------------------|----|
|  | TCTTACTCAT GCATATGAGT GCAAGGGCCT GAGCATTCAT CAGCAAGATT AGAGCGATTT | 60 |
|  | TTAC                                                              | 64 |

30 (2) INFORMATION FOR SEQ ID NO: 1678:

(i) SEQUENCE CHARACTERISTICS:

|    |                           |
|----|---------------------------|
|    | (A) LENGTH: 65 base pairs |
| 35 | (B) TYPE: nucleic acid    |
|    | (C) STRANDEDNESS: double  |
|    | (D) TOPOLOGY: linear      |

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1678:

|  |                                                                   |    |
|--|-------------------------------------------------------------------|----|
|  | ACAGCTGATT TATTAAATGA TACTAAGTCC AAAGGCATGC GCATTATATC AGTTGGTACA | 60 |
|  | TTTCA                                                             | 65 |

45 (2) INFORMATION FOR SEQ ID NO: 1679:

(i) SEQUENCE CHARACTERISTICS:

|    |                            |
|----|----------------------------|
|    | (A) LENGTH: 362 base pairs |
| 50 | (B) TYPE: nucleic acid     |
|    | (C) STRANDEDNESS: double   |
|    | (D) TOPOLOGY: linear       |

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1679:

```

5  AGCGCCACCA ACTGACGAAT TAGGTGGTAG TTGGACACTA TGGAAAAATT TAGCGCGACA      60
   AAGTCCTGAA TTTGGTAATC CTGATAAGTT TTGCCAAAAT ATTCTTAAAA AAAGTTGGTT      120
   TGTTCAGCA ACTTCTACAA CAAACAATAA AGAGATTATC GATACAATAG AAAGTATTTG      180
10  TAAACGTGAC CCACTTGGCA GGCAAAACAG TTACAGGCGG TATTATTACA ATCAATGATT      240
   CTGcATGGCA AATGAGTTTT ACAATCAATC GTGCAGCAAC AGTTTGAAAG ACCAACCTGG      300
   AAAATGGAAA TATCTACATG GGGTTTGATG CCTTATGATT CnGGnGTAAA CGGCGGTTGA      360
15  TG                                          362

```

(2) INFORMATION FOR SEQ ID NO: 1680:

```

20  (i) SEQUENCE CHARACTERISTICS:
     (A) LENGTH: 69 base pairs
     (B) TYPE: nucleic acid
     (C) STRANDEDNESS: double
     (D) TOPOLOGY: linear

```

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1680:

```

   AGATACTTCA GATTTAGCAT CATGAAGCAA CTTTAAAAGC AATCGCTGAC GCTGGTATTC      60
30  AGCCCCGAGG                                          69

```

(2) INFORMATION FOR SEQ ID NO: 1681:

```

35  (i) SEQUENCE CHARACTERISTICS:
     (A) LENGTH: 56 base pairs
     (B) TYPE: nucleic acid
     (C) STRANDEDNESS: double
     (D) TOPOLOGY: linear

```

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1681:

```

   TAACCATTTT TTTTGACGTT TTATGTTGTT TTAAGAAATA AATACCAGTT AATGTA      56

```

45 (2) INFORMATION FOR SEQ ID NO: 1682:

```

   (i) SEQUENCE CHARACTERISTICS:
     (A) LENGTH: 56 base pairs
     (B) TYPE: nucleic acid
50  (C) STRANDEDNESS: double
     (D) TOPOLOGY: linear

```

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1682:

## (2) INFORMATION FOR SEQ ID NO: 1683:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 109 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1683:

CCCCAACACA ACAAACAACA CACCCACCAC CCAACCCAC CACACCCACC CACCACCCCA 60  
 ACCCACCACA ACACCACnCA CCAACACACA CCACACAACA ACCCCACAC 109

## (2) INFORMATION FOR SEQ ID NO: 1684:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 62 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1684:

ATTATGTTTCG CGATAATTTA AGTAAAAGAA GCACAGATAT TGAATTTGAT AGGAGTAATT 60  
 GT 62

## (2) INFORMATION FOR SEQ ID NO: 1685:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 57 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1685:

CATAAGGTAC TTAAATTAAG GCATATCTGC TGTCTAGCAG TCGCATAAAT CATTAGA 57

## (2) INFORMATION FOR SEQ ID NO: 1686:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 56 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1686:

## (2) INFORMATION FOR SEQ ID NO: 1687:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 110 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1687:

CTTTATAGTA TATTGCTTTT TGTTTTTCTT TTTCGTCATA TTCACTTTT AAATAGATAC 60

CTGCAACACT AATTAATATG ATTAACATAA TACTAGTTAA TATTAAATT 110

## (2) INFORMATION FOR SEQ ID NO: 1688:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 214 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1688:

AATTACTAGT CTGCTTGTC AAAGATTATT TATATTCTAG CTCAACATTA ATTTCTTTGA 60

TTTTGGTACC ATCTATCGTG TCACCCATGC GATGCGGTTG TAGTTTTTTT GTAAGTTCGA 120

AAGTATAAAA CTTATCATCT TCCATTTTAA CTACAATTTT ACCTTTTCTA TTATTAACAG 180

CACCATATAA TTTTCTTCT TCCATCAATT TTTT 214

## (2) INFORMATION FOR SEQ ID NO: 1689:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 59 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1689:

GCTAGTTGTA ACGTGCTTTT TCACCACCAG ATAAATCATA ATATCTTTTA ACATCTCTG 59

## (2) INFORMATION FOR SEQ ID NO: 1690:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 55 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1690:

CCAAACTTTA TAATATGAAA TGCTTGGTAA TTACAAAGAT AAAATCATAC TCACG 55

5 (2) INFORMATION FOR SEQ ID NO: 1691:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 64 base pairs

(B) TYPE: nucleic acid

10 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1691:

TAGACAGCAA TCCATTGCTA TAGGGGTGGA TATCTCATTT GCGTTTGGAG CTGTGCTTGT 60

TATG 64

20 (2) INFORMATION FOR SEQ ID NO: 1692:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 57 base pairs

(B) TYPE: nucleic acid

25 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1692:

TGCATGGGAT TGCAGCTAAG AGAATCATAA AAATATATTA CTTTAATAAG TG TAGTA 57

(2) INFORMATION FOR SEQ ID NO: 1693:

35 (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 74 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1693:

45 CGATGTGTAC GTCTCACCTG ATTCGCACG GTAAGCTAGT GCATATTCAG CACCGCTACT 60

CGCCCAGCCT AGAC 74

(2) INFORMATION FOR SEQ ID NO: 1694:

50 (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 162 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

55 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1694:

5 AACTTTTCAG ATGTTGATAG CTATAGATTT AGGCGCTATT CACCAngTCT ACATGCAATA 60  
CGTACGTTAT AATGCACTGC AACGAATCGC GCGTTATGAG TTGGTAATTG TTGTTCAATA 120  
TTGGGTGTAT AGTTTTCAAC GTGGTTACAA GCAACTACCT AA 162

10 (2) INFORMATION FOR SEQ ID NO: 1695:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 55 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1695:

20 AATTATCTCT ACACCTTTTC TTTCACATAA TTGACGCAAT ATAATCCCTA TATCT 55

(2) INFORMATION FOR SEQ ID NO: 1696:

(i) SEQUENCE CHARACTERISTICS:  
25 (A) LENGTH: 56 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1696:

ATGCAACGTT GGCATTGGGA AATGGTCCTG CCTAAATTAA CACGCAATAA AATGTG 56

35 (2) INFORMATION FOR SEQ ID NO: 1697:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 57 base pairs  
(B) TYPE: nucleic acid  
40 (C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1697:

ACTGTGTAGA AGATGCTATT ATTGTAAAC ATAGTTTTAA TTTTATTTTC TGATATA 57

(2) INFORMATION FOR SEQ ID NO: 1698:

50 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 109 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
55 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1698:

AAAATTTTCC CCCGGAACC CGGTTTTTTA AACCCCCCGT TTTAAAAAAA TTTTGGGGGG 60  
 5 CCCAAAATTT CCCAAAAAAA nAAAAAATTT TTTTTTCCC GGGGAAAAA 109

(2) INFORMATION FOR SEQ ID NO: 1699:

(i) SEQUENCE CHARACTERISTICS:  
 10 (A) LENGTH: 100 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1699:

GTGTTAACGT GGATTATATC AAnGAGGCGG TCAGGTACAG TCCACACGCA CAGCGCACAG 60  
 20 AAGTATCACA TCCAGTAAAC AAGGCTAGTA CAGCATTGCA 100

(2) INFORMATION FOR SEQ ID NO: 1700:

(i) SEQUENCE CHARACTERISTICS:  
 25 (A) LENGTH: 129 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1700:

AAGGTAAAT GAATTAGGTT GATCAATGCT CTATACTCAT TGCTAAGTCA ACGCACCTTT 60  
 35 ACCACCTTTT CCCAACTCAG TAAGGCATTC GACGTATTTT TTAGCCAAGn TTACATATCT 120  
 ACTCTGCAC 129

(2) INFORMATION FOR SEQ ID NO: 1701:

(i) SEQUENCE CHARACTERISTICS:  
 40 (A) LENGTH: 63 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1701:

CAAGAGGAAC AACTCGGTAC TGCGCATCAG CAGAGATGGC GAAATCACAC TTAGAAGACA 60  
 AGG 63

(2) INFORMATION FOR SEQ ID NO: 1702:

(A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1702:

10 TATTTAATAA ATCTTCAATA CCTTGTTTCAT CAGTTTGTTG ATAAATAAGA CCTCTCCATT 60  
 TTAAATCTTC AATTAATACA TTCGTCATTA TTATTTCTC CTATTTATAA TTATTTATTG 120  
 AATACTTGTT AAAATACTTT AAAGkTTTTT GAACGTAAAA AAAACCCTTA CAACAAATAT 180  
 15 GTAAGGGCGC GATTGCACGT TACCACCAAA CTAAACATA ATCATAAGAT AATGTTCACT 240  
 CTATTAATGA TACGTTTCATT AATAAACGTA GGACATGTTA GTTATAAAGG TGTATTCATA 300  
 TTATTAATAA CACTAGTTCA CAGCGACCAC TAGCTCTCTG ATGATTTCAG ATAATATTAC 360  
 20 TTGTCCTTTT ATCCTATTCT GTATGCATTT TCCCTAATTA 400

(2) INFORMATION FOR SEQ ID NO: 1703:

25 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 208 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1703:

TCAATATTGA TATCGAAACG CTTTGCAGAT TGATATAAAT TATCAGAATC AAGTAATTCA 60  
 35 TTTATTTTCT TTGGTGAAAG TACTTGGAAT ATACTATACT GATGAAACT TAAAAATGAA 120  
 ATGAAGTATG GAAGTTGTTG CTTTGGGTAA GCAAAATTTT TAATACATAC TGATTAACT 180  
 40 GTTTGTTTAT TGnGAATTGC AACGCATC 208

(2) INFORMATION FOR SEQ ID NO: 1704:

45 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 67 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1704:

AAGCCGATGT AATTATTTAT GCAACACCTG TTCTAATGCA CAAAGAAATA TCTTAGCGAG 60  
 55 CTTATAG 67

(i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 54 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1705:  
CCAAGTTGCA TGTTATTTTA AGCTGACTTT CCACCAACTT CTGAGTTTGT GGCC 54

(2) INFORMATION FOR SEQ ID NO: 1706:

(i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 61 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1706:  
CAACTACACG AAAGGGTAGT GCTTCAAGAT AATAACGTCC AATTATTAGG AACTGTGGCG 60  
A 61

(2) INFORMATION FOR SEQ ID NO: 1707:

(i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 54 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1707:  
ACCATTCCAA ATGAACCTAA ACCACTTGAT ACGTTGACGA CAACAGGTTG TTCA 54

(2) INFORMATION FOR SEQ ID NO: 1708:

(i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 59 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1708:  
AAATTTGAAT AACTGTACAC ATTTTTTTGA TCATAGTCTA TATACTTTGT GAATTAATT 59

(2) INFORMATION FOR SEQ ID NO: 1709:

- (A) LENGTH: 59 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1709:

10 GCACAATAGC CAATTAGATG GGGCCGGTGC GGTAACATTT TGCTTCATTC CTGCATTAT 59

(2) INFORMATION FOR SEQ ID NO: 1710:

(i) SEQUENCE CHARACTERISTICS:

15

- (A) LENGTH: 55 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1710:

TTACAATTCA ATCAAGTTCT TCATTATCAG ACGAAGAAAT CCACCGTATG GTAAA 55

25 (2) INFORMATION FOR SEQ ID NO: 1711:

(i) SEQUENCE CHARACTERISTICS:

30

- (A) LENGTH: 56 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1711:

TTTCTGCTTA TTGTCATTCG ATATCGAATT ATTAGAAAGT GCAGATTTTCG CATCAG 56

(2) INFORMATION FOR SEQ ID NO: 1712:

(i) SEQUENCE CHARACTERISTICS:

40

- (A) LENGTH: 55 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1712:

50 TAAACCTTTA GGATTGCTGG CAATAGTAGT GCAGTTGGCT GGACTTGTCA TGCCC 55

(2) INFORMATION FOR SEQ ID NO: 1713:

(i) SEQUENCE CHARACTERISTICS:

55

- (A) LENGTH: 207 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1713:

5 CAAGAGGATT CGTGCAnTGA ATTCATGGAG ATATTTAGAT CTTTCACTGG AGAGAAAATA 60  
 AAAAGAAGAA AAGAGTAACC TTTAGATTGC TGGATnTGTG CAGTGGCTGC TTGCGTGCCT 120  
 TTAGGTGGCA TAAGGAGGCT ATACGCAGAC AACCACCGTC CCGGGGTTTT ATTGTACACT 180  
 10 GTGTAGGACG CAGACTTTAT GTGGTTG 207

(2) INFORMATION FOR SEQ ID NO: 1714:

(i) SEQUENCE CHARACTERISTICS:

15 (A) LENGTH: 84 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1714:

TGTTTATCGA CTGCTCGTAT ATTTTGACTG TTTTGACTGT TGTTCCGTA GCAATACTAT 60  
 25 CTCCTAAGCC TTTCATTGGC ATTG 84

(2) INFORMATION FOR SEQ ID NO: 1715:

(i) SEQUENCE CHARACTERISTICS:

30 (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1715:

GTTTGAATTG ACTGACTTCG TTTTACCGCG TGTTTAATAT TGTTATACAT ATAT 54

40 (2) INFORMATION FOR SEQ ID NO: 1716:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 77 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1716:

50 GAAGCCTGTC AGTGGATCAA ATTATTGAAG ATAACTTGGG TGGCATT TTTT GGAAAGTCCA 60  
 AATGCTGGGA ATGGTCA 77

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 154 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1717:

GGGCCCTTTT TTTCCCAAAA AAAAAAACCC CCCCAACCCC AATTTTGGnC CCCCTTCCCC 60  
 TTTAAAAATT TAAAAATTGG GCCAAAAGGC CCCCCAAAA AAAACCCCCA ATTGGAATTG 120  
 GAAAACCATT GGAACCAATT CCATTGAACC AGGA 154

(2) INFORMATION FOR SEQ ID NO: 1718:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 120 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1718:

ATTGTCTACA CTGCCACTTT ATTTTCATTA ACCATTTTAC AAATGTGTTC ATCATTCAAC 60  
 ATGAACATCA ATTGTTCAAT TACATCGACA CCTGATGCCT AAnCACGCAC CTTTTCACA 120

(2) INFORMATION FOR SEQ ID NO: 1719:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1719:

TTCATTTGTT TGTAAGAGTG GCATTTCTAT GTCTTAAAG TGACGAAACT TCAC 54

(2) INFORMATION FOR SEQ ID NO: 1720:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 55 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1720:



## (2) INFORMATION FOR SEQ ID NO: 1721:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 71 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1721:

TTTGGATTAT AAATTGACAT GTAAGTACGA GGCAGCTGTA CCCGATATAT AATTGCTAAG 60  
 AGTTAGGGCT G 71

## (2) INFORMATION FOR SEQ ID NO: 1722:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1722:

TTTTATCTTT ATTACTAAAA CCAACTGCAC CAAAGTTTGC AGTCATTACC ACACGTTTAA 60  
 CACCCGCATG TTCTGCAGCT CTTAAAAATAC GTTGATATACC TTCAATTGCA GGCTTCGCCA 120  
 TCACCTCTGC ATCGTCTGTT TTACCGAAAA ACACCGGAGA TGCTACACTC AAGACATACT 180  
 TGCAATCTTT CATTGCTTCA TCCCAATGTh CATCTTGTGA TAAATCCGCT TCGACAAACA 240  
 TTAAATCGCT CTGTGGAAAT GCCCATGTCT TGCATTGTTT nAATTACTTT ATCAGCTTTA 300  
 CTTAAATCAA GnatCGTCGT TTGTA 325

## (2) INFORMATION FOR SEQ ID NO: 1723:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 71 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1723:

CAGTATTGCA GTCACGACAA TGTGATGACT AAATTATCCA AAGTATGAAT TCCATGCGGC 60  
 ATTAATCCTA G 71

## (2) INFORMATION FOR SEQ ID NO: 1724:

(A) LENGTH: 53 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1724:

10 TTGCAACGAT ATTAGGCTAT CTAGTCGGCA TATTTGTAAA ACAAGATCCA ATT 53

(2) INFORMATION FOR SEQ ID NO: 1725:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 71 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1725:

ATCTATTTCAT CTTCTGACAC GGACAGGAAA TGAGTCCAGT AGATGCACAT TGGGAATTAA 60

25 TCGAAGCTAG C 71

(2) INFORMATION FOR SEQ ID NO: 1726:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 71 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1726:

CATCTTGCAG GTCTACATTA TAAAATGTGA AGTTTTCTAC GATAACAATT GGGAAACTCA 60

40 GGGGCATCTC C 71

(2) INFORMATION FOR SEQ ID NO: 1727:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 235 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1727:

TTCTTTTAA AAAATTCCCC ATTCCTTTTT AAATTTCTTT CCGCTGGAT TAAATGGATT 60

55 TTAAAAATTC CACCCCAACT TAAATTAAA TGGCTTGTGG AAAATTAACG GGATTGGCAT 120

TCCAGCTTAA ATGGTTTTTT TGGAGGCTTC CACGTTAAAA ATGGCGGGTG GCTTT

235

(2) INFORMATION FOR SEQ ID NO: 1728:

5

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 61 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1728:

15 TAGAGTGGCT ATAAAGCTAA GTTCAATTGA CCAATTTACA ACAGGTTATT GAGGACAATA

60

A

61

(2) INFORMATION FOR SEQ ID NO: 1729:

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- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 54 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1729:

30 ATCACCAAGA AGTTCTAATG CTTGGTATAA ACGTTGAATA CGACGTTCCG TATT

54

(2) INFORMATION FOR SEQ ID NO: 1730:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 59 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

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40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1730:

CGTCCCGAAG CGTTGGAGGC GGGAACATCC AGAGTAATTG GCACAGATTA TGACCATAT

59

(2) INFORMATION FOR SEQ ID NO: 1731:

45

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 60 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1731:

55

## (2) INFORMATION FOR SEQ ID NO: 1732:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 105 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1732:

TATGTGGTGT TCAATGCAGT GGTCATTATG GTGCATCTTA CCAGATTCGG CATTCTTATT 60  
ATAACTATAC TTGTAATAAA TGGCGACATG CAGACACGnC AATAC 105

## (2) INFORMATION FOR SEQ ID NO: 1733:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1733:

TTTACGTTCC ATAGCAAAGT GATACAAACG TCAGCATCAA TGTAAGGCAT AGATCATAGT 60

## (2) INFORMATION FOR SEQ ID NO: 1734:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1734:

TTCCATCATA CATTGCGGTT TTA CTTTCT TCTGGTATGA TCAAATATTC ACATAA 56

## (2) INFORMATION FOR SEQ ID NO: 1735:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 57 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1735:

AAATGGGGAT GAAACAGTTA GTGTACAGGT GAAAGCTTAA CAGCAGCTAC AATTGCA 57

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 61 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1736:

GATTTGCAAT TAAACTTAAA TGTAATTTTT CGGAATGTGT ATTGGTTTA CTAAAGTAA 60  
A 61

(2) INFORMATION FOR SEQ ID NO: 1737:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 57 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1737:

AAAGAAGCTA AAGAAAAAGT TGATAAAACA GCAAAAGTGA TTATTAGCTA CAGCATT 57

(2) INFORMATION FOR SEQ ID NO: 1738:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 54 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1738:

CAATAATATC GCTAAAACCG CCATTTGTAC CAAATGAATT TGATAATGCT GCAG 54

(2) INFORMATION FOR SEQ ID NO: 1739:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 59 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1739:

TAGAGCCCAA CCGGCAACCC ATCCATGGAA ATTCACCAAA ATAATACATT GACCCCAAG 59

(2) INFORMATION FOR SEQ ID NO: 1740:

(A) LENGTH: 136 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1740:

10 CCTTTTGGn AATTTAAGGG GGTTCCCAAC CAAATTC CCC CAAATTTT T TGGGT TAAAA 60  
AAACCCGGCC CAAAAATTTA AGGGAATTTG GAAAAAGTT TGGTTCCTT TTTTCCCAA 120  
GGCCCAAAT TTGGA 136

15

(2) INFORMATION FOR SEQ ID NO: 1741:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 53 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1741:

25

CATTCAACCA ACGACTGACA ACAGAACATT TAAGAGTCTA GGACATTGAT TGA 53

(2) INFORMATION FOR SEQ ID NO: 1742:

30

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 52 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1742:

40 GCTCGTCTGA TTCAGTCACA AAATTGTCTT GTTATACTTG TCACCTATCA TC 52

(2) INFORMATION FOR SEQ ID NO: 1743:

45

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 53 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1743:

TGTTATTTAA AGAGGCTCAA GCTTTCATAG AAAACATGTA TAGAGAGTGT CAT 53

(2) INFORMATION FOR SEQ ID NO: 1744:

55

(A) LENGTH: 94 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1744:

10 TCTGAGTTAA AGACGTCTCA CTTAAAGCTT TAGCAATTCC AACATCAGA TATCTTCACA 60  
 CGTGTTATAT GTGTCCATTA ATATATCCTG TGGC 94

(2) INFORMATION FOR SEQ ID NO: 1745:

15

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 212 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1745:

25 GGAAAAAAnn TTTTTAAAAA AAGGAAAAG GGAATTGGGG TTCCCGGCC CTTTTTAAAG 60  
 CCCCCAAATT AAGGAAATTT TAAATTTTGG GGAAGGGGAT TTTCCACCGG TTAATAAACC 120  
 GCCGATTTTG AGGGGGTTGA ATTAATTGGC CCAAATTTAA AACCTGGAT GCTGGGTCCA 180  
 30 ATTTTTTACC GGGACCAATT GTCCTGCAT GA 212

(2) INFORMATION FOR SEQ ID NO: 1746:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 58 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1746:

TATCTTCCGA TGAAGAACAA GATGCACAAG AAGTACGCCA ATGATTTAAG AAAGTGGT 58

45 (2) INFORMATION FOR SEQ ID NO: 1747:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 105 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1747:

55

AAAATTAAGn CCTTTTTTAA CCTTTCCTT CCCCAATTGG GGCCT

105

(2) INFORMATION FOR SEQ ID NO: 1748:

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- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 52 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1748:

15

AGTGCCTATT ACTTTGATTG ATGTCCAAGT TTCCTATCAC ACAACTTAAT TT

52

(2) INFORMATION FOR SEQ ID NO: 1749:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 95 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1749:

AAAGCATCAT CCGAACTCCA ATGATTATAC TCCCTAGATA TTATTATGTG ATGCTTTGAG

60

30

CATTAATTAG AGATGGGACG ATTCCATGAA AGATA

95

(2) INFORMATION FOR SEQ ID NO: 1750:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 63 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1750:

TTGACACATC TACTCACATT AAAAGTAGAT GAAGCGTTGA GATTAAACATT TCCACATTTA

60

45

CAA

63

(2) INFORMATION FOR SEQ ID NO: 1751:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 116 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

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TCGATATTTG AGACACGCTG CTGTAATAAA ACATCCTATA AAGTATATAC CAAGATCTAC 60  
CAATATAAAC AGCGGCTATA TGATATAAAT GCTCAGACAC ACCCnCTGCG ATCCAT 116

5 (2) INFORMATION FOR SEQ ID NO: 1752:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 114 base pairs  
    (B) TYPE: nucleic acid  
10     (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1752:

TATGATTAAG CTTAGTGCAG ATTTGATTTA TThACAACG CTTCACTACA TTAAAAATAG 60  
GGCACTCGCA CATATAGTTG TATCAATAGC CTTTATCAAT TTTTGGGAA GGTT 114

20 (2) INFORMATION FOR SEQ ID NO: 1753:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 52 base pairs  
    (B) TYPE: nucleic acid  
25     (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1753:

30 AACTTCAAAT GTGCCAAGTG TTGAATCACA TCAAAATCAT TTTTATTAA CG 52

(2) INFORMATION FOR SEQ ID NO: 1754:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 75 base pairs  
35     (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1754:

ACTAATCCCT TGCGTGTTC CAATCAATTG CATTATTAGT GGCCATTGT TTGATATAAC 60  
45 TGACAAGCTT TAACC 75

(2) INFORMATION FOR SEQ ID NO: 1755:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 53 base pairs  
50     (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1755:

GTGAACAAGG GTAGATGTAA ATAGTTGATG CATGTGTACA CATCATAACA AAA 53

5

(2) INFORMATION FOR SEQ ID NO: 1756:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 66 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

10

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1756:

TTATTTGGGC AGGCAAATAC CCTTAATATA TTCAAATCAT GTTAATATCA TTGCTATTGC 60

TAAACC 66

20 (2) INFORMATION FOR SEQ ID NO: 1757:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 57 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

25

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1757:

ATTAATCGGA GCACTTGGGT TCGCAATTTA TGCTGAAATG GATCATTCTA CATCATC 57

(2) INFORMATION FOR SEQ ID NO: 1758:

35 (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 399 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1758:

CGAACAATAA CTCTAAGTAT CCAACAAATG CTGCAAGTGT ACCTACTGTG ATTGATCCAG 60

45 AAATAGCAAG ATATGCACCA ACACCGATGA CAATAATTGG TCCAATATCT GTAACGTAT 120

TAATTGCGGC AAAGGAATAg GCATTCCATC TTGTATGTTT CAACGCACGT GTTAGGAAAT 180

50 TAGTATTCTT TTTATCAAAG TTTTTCGCTT CATTGTCTTC AATCGCAAAA CTTTTAACGA 240

CTGAAATACC TTGAACACGT TCATGCAAGA ATCCTTGAAC CTCAGCTAAT GCTTGAGATC 300

TTTCAnGTGT CAATTTTCTT AATCTTCCAA AGAAAACGTA CACCGTTAAA ATGTAAAATG 360

55

## (2) INFORMATION FOR SEQ ID NO: 1759:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 139 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1759:

ATTATGTCA TGCTAGGTCA CTTGCATCAT CCATTTAGTA TAGAAGACGA CAAAATTAAA 60  
 TTATAGTGGG CTCCTTGATT GGCAGTATTC ATTTTCGGA AGCGGGGTCC AGGCTTAAAG 120  
 GGTATTAGAC GTGGTTACC 139

## (2) INFORMATION FOR SEQ ID NO: 1760:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1760:

TCGCCCCTCC AGGCTATTAT TTCATCTATA TCATTGTCAT CAGTTAAATT CAGCCTCGAC 60  
 ATTTCCATT CAATAGACTG TTCATTCAAT TCTAAGTCAT TATTGTAAGT TTCTAGTTGA 120  
 TTTTCATAAT GATTTAGATT ATTTTGCTCA ATTAACTTTC TTTGAGACAA TTGCATTAAAC 180  
 TTATCTTCAA TCTCCTTTGA GAGTTCTTGA TGCTGATTCA CATCTTGAAC ATACTTCTTA 240  
 TAATCCACCT CAAAATTAGT GATATTAnTA TATnTCGAGA GTGTTTCAAA TTCAGTGATG 300  
 AGATCTCGAC ATAAT 315

## (2) INFORMATION FOR SEQ ID NO: 1761:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1761:

TAAATCCTCG AGATTCTTAA TAGGGTAGAT ATCTAACGTT TTCGCAAAGC TCTTTTGTGAT 60  
 TTGTTCTTCT TTTGAATCTC CAATGATCTT ATTATCACCA TCACAAGATG TAACAAAGAT 120

CCATCCTCAT CATTTCATCAT CTTTCATCTAC CTTGCGGCT GGAAATTCAA aGAaTCTATT 240  
 ACTGACAAAT CGCTTTTCC ACCTTTTGAA AAGTCAATT CCAACTTTT ATAACCCACA 300  
 5 GAACTTCCTT TCAAATTACC ATCAATATGC ATTTTAAATA CCGGTGCTTT ATCAGTAGGA 360  
 ATATTATAAC GACTTCTTAA TTGCTTAACA TTTTCATCT 399

10 (2) INFORMATION FOR SEQ ID NO: 1762:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 224 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1762:

20 GTATAGAAGA CGACAAAATT AAATATAGTG GCTCCTTATT GCAGTATTCA TTTTCGGAAG 60  
 CGGGTCAAGC TAAAGGTAT AGACGTGTAC AATTAATGAT GGCATTATTA ACGATGTATT 120  
 TATTCCTCTT AAGCCACTTA GACAATTGGn AATTATCTCA GGCGAATATA ATGATGTAT 180  
 25 TAATGAAAAA GTTCATGTGA AAAATAAAGA TAATTATnTA CATT 224

(2) INFORMATION FOR SEQ ID NO: 1763:

- (i) SEQUENCE CHARACTERISTICS:  
 30 (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1763:

AGCAACCAAC GCCAGATAAA GCAGAAGATA ACGCATTTC CCCCATCACC ATAT 54

40 (2) INFORMATION FOR SEQ ID NO: 1764:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 59 base pairs  
 (B) TYPE: nucleic acid  
 45 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1764:

50 ATTCCCTTAT CGCATTCTGT AAAATGATCT TCATCAGAAA TTGCTTCGAT ACGTTTATG 59

(2) INFORMATION FOR SEQ ID NO: 1765:

55

(A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1765:

10 GATTCAATTC ATCTGTATAG ACGATATATC CTGATATGAA TTGGAAATGG AATA 54

(2) INFORMATION FOR SEQ ID NO: 1766:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 85 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1766:

ATCGCATAGA AGCATTAGAC TCAAACIATT TTCGGTTATG AGAATAACTC TGACATCCAT 60

25

ATGGATACIT AGTTTCCAAG TTAGA 85

(2) INFORMATION FOR SEQ ID NO: 1767:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1767:

CAGTACTGCT GAATGATGCT ATTGATTTTC TCATGAGACA TGGCGATAAC ATCG 54

(2) INFORMATION FOR SEQ ID NO: 1768:

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(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 116 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1768:

50 GnCACTACTA ATCGTATCAG GATCACTAAT TAAGGCATCC AGCATCAGAT ACGAGCGCAC 60

GTCAGACTAA TCTACTGTCA TGATAAAGCA GCTGCTAACC TTGTAAGTTC GTGAAA 116

(2) INFORMATION FOR SEQ ID NO: 1769:

55

(A) LENGTH: 82 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1769:

10 GTTCTATCCA ATATGGAAAT GAGGACATTA TGC GTGAAAG CTATGGACGA TGGACGATGG 60  
TACACGCATG TTGTGTAAGC AG 82

(2) INFORMATION FOR SEQ ID NO: 1770:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 152 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1770:

25 TATCTGTATT GTAGTAATCC GCTTCTCCCA TCTATATAGG GATCTTTCGT AGATATTCAC 60  
TTTATGCCTA GGATCCAAGA TGTGTAAGCA GCACTTTGCA TTATCTAATG CAAAGGGnAC 120  
ATGCGGCTGT AAGCCCTGTT CTGATAATCA TA 152

30 (2) INFORMATION FOR SEQ ID NO: 1771:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 51 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1771:

40 TGGAGGCGAA GTAAATGAAA AGTATTACGT TTGAAGAACA TTATGTCATT G 51

(2) INFORMATION FOR SEQ ID NO: 1772:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 232 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1772:

nGAAACAAAT ATCTGATGAG ATATGCAATG ATGACTATAA GTAACATTAA AATGAAGCCC 60

55

CGTACACCAA TTATATCTTT GTGGnTGTTA TATTAAATCT ATATTATGTT CATTTAACAG 180

CATATGTATA AAATTGACAG TTAACACATG TAGCTATTTG ATGTGAATGT GC 232

5 (2) INFORMATION FOR SEQ ID NO: 1773:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 108 base pairs

10 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1773:

TAATGTCCCC CAGAATGTAG GCAAATGCAG AACCTGGTTT TAGGGTCAAC TGTTTnTTCT 60

CCAAGCAGAA ACAAAGTTCT TGTGTCAGTG CACTTTTGGT CCACCATT 108

20 (2) INFORMATION FOR SEQ ID NO: 1774:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 111 base pairs

25 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1774:

CGCAATTGAA GGATACACTA TTTTAAGAGC TGCAAACATG CGGGTGTAAC GTGTGGTATA 60

CTGCAACTTT GGTnATTGGT TTAGTATAAG ATAAAATCAT CACAATGAAT C 111

35 (2) INFORMATION FOR SEQ ID NO: 1775:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 73 base pairs

40 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1775:

CAGGTTATCA GCTAATAGAT ATGTTGAAGA GGCAGTTGCA GGCCAAATGA AACTGCAGAT 60

GTA GTTCA GT ACC 73

50 (2) INFORMATION FOR SEQ ID NO: 1776:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 67 base pairs

55 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1776:

5 TAGACACAGT GCAAAATCTG GTACAGCTTA TGAATTAGA CGGGTAAAGC AAATTACTGA 60  
GTACCCA 67

(2) INFORMATION FOR SEQ ID NO: 1777:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 127 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1777:

GTATGCCAGT GTCATTGCTG AAAACATCAA CCATTCCCTG CACCAAAATT TTTGGTAGA 60  
 20 GTTTGATGCT GGCCATCCTC CAAGGGACTA AGGTAATTT TGTATAAAAA GAGCCAAAGG 120  
 CCCAATG 127

(2) INFORMATION FOR SEQ ID NO: 1778:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 236 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1778:

35 GAACCCAAAA ATTAGCAACA GTGGCTACAA TAGTTGGGCA CTGAAAGCCA GCCAAGTGGG 60  
 ATTTTATAGCC CTTGATTGA AAGCGGGGTC CCCAGGATTA AAAAATTTAA ATTAGCCTAA 120  
 TAAGCCCAAA ATTCCCATTT GGAAAAGGAA ACCTCCTTAA ATTGGGTTGG AAAAAAGnTT 180  
 40 AAAAAAAAAA AGGCCAGnC CTTGGAATTT TTTGGAATTG GAAAAAGGAA TTAAAA 236

(2) INFORMATION FOR SEQ ID NO: 1779:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 50 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1779:



## (2) INFORMATION FOR SEQ ID NO: 1780:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1780:

GACGACTCGC TTCTATTTTA AAATCCGGCG TACTTgGTTA TATAAATATC ATAATGGTTA 60  
 AAATTAAAAA GCAATGTCAG TTCACACTAT TACTGACATT CTTTtagTTA TGTGTATATT 120  
 ATTCATTCAC AAGCTTTTGG TCTATAAATC GAGTGATTG CTTTgTTTGT ATATAACCAT 180  
 CTGCTACATA TTCATCGTTC ATTGTAATTA ATGGATAAAA TAGTTCATCn n 231

## (2) INFORMATION FOR SEQ ID NO: 1781:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 209 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1781:

GTCTCCCTGC CCCACATTTA ACATTGTAAT TTTGTGATGT GAATTTGTTG GAAACGTTAT 60  
 TAATAATGTC AGAATAATTA TAGTCCAAAA CGTAACCAAT ATATATTTAC GTTTAGCCAA 120  
 TAACCAAAAT ATGTAATAAAA CAGAAATTAT AAATACTATA AATATCCAAT CATTAAACTT 180  
 GGGAACAGAA AAATGTGATT GCTTGATTG 209

## (2) INFORMATION FOR SEQ ID NO: 1782:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1782:

GTTAAGCTTA GTTAGATAAAA ATGCAAATCA CATTATGTA GATAGTCTCT TTTC 54

## (2) INFORMATION FOR SEQ ID NO: 1783:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1783:

TCTGGAATGT CTCCTTGTCT CTCTATATAG CTATAGTCCG TCGCAAGCGG ACGTAATGTT 60

10

CATTTTCATA ATGATTATAG TATGAAAGCG CTTTCTTGTA TATGTGACAT GTGCGTGTnG 120

(2) INFORMATION FOR SEQ ID NO: 1784:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 57 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1784:

CTACCATTTA CATAAGACC GTCTAATTCT TCAGTTTCAA TGGCATTTTG GAGCAAT 57

(2) INFORMATION FOR SEQ ID NO: 1785:

25

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 54 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1785:

TCATAACCAT TACCAAGTAT CCAAGCAGCT TTAAACAAT ATGGCATAAA CATT 54

(2) INFORMATION FOR SEQ ID NO: 1786:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 84 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

40

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1786:

GGATGGGTGA TTTAGCAGG TTTGGCTATG AGTACCGTAT TTGCATTAGG ACCGATTTCA 60

TTTAACAAAA TCATAATTTT GGGC 84

50

(2) INFORMATION FOR SEQ ID NO: 1787:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 134 base pairs

55

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1787:

CCGGTTTACC CTTAAAATTA TTTTGTGGGG GGTTCATTA AACCTTCCAA TTCCAATTA 60  
10 ACCCCnACCC CCCTGGGTTT TCCTTAAAAA CAAAAGGCC CTTTTTTTC CCAACCCAAC 120  
CTTGGGGGAA TTGG 134

(2) INFORMATION FOR SEQ ID NO: 1788:

15

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 70 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1788:

TATATCAACT AAAAAGCGCA TCTGCAACCG ACGTTGAAA ATTTGGACAG GAGACAGATA 60  
25 ATGTAATATA 70

(2) INFORMATION FOR SEQ ID NO: 1789:

30

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1789:

AATATCCAAT TATACAAGCA GGTATGGCAG GAAGTACGAC ACCGAAATTA 50

40

(2) INFORMATION FOR SEQ ID NO: 1790:

45

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1790:

TGATTTACTA GCTGAATCCG ACATGCTTGA TGATACACTA TGTGAATTCA 50

(2) INFORMATION FOR SEQ ID NO: 1791:

55

- (A) LENGTH: 58 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1791:

10 CCGGACGCTT TACTTCCAAC TTTAGGTGGT CAACACAGGT TTAAACATGG CGATGTCA 58

(2) INFORMATION FOR SEQ ID NO: 1792:

(i) SEQUENCE CHARACTERISTICS:

15

- (A) LENGTH: 58 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1792:

CATCATCCTC TAATTTAGTC CAAACTCCTG GATGATATCC AAATGAAGTT CCAATTGA 58

(2) INFORMATION FOR SEQ ID NO: 1793:

25

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 62 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1793:

35 CACAAGTTTT AGAAGGAAAC CAATAACAAA TGACGAGATT AATTGCCACA AACATTAACG 60

AC 62

(2) INFORMATION FOR SEQ ID NO: 1794:

40

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 103 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1794:

AAGGCCCGGG GGGTTTAAAA AAAAAGGTTT AAAAAGGnT TTGGCCCTTT AAACCCAAAG 60

50 GGAAATTTTA ACCCCAAAAA AAAAAAACCC CTTTGGGAAA GGG 103

(2) INFORMATION FOR SEQ ID NO: 1795:

55

(A) LENGTH: 121 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1795:

10 TATCGATCGA TCATGTCGAA TCGATCTGTC GATCGATCGT ATCGATCGAA TCGCGTCGAA 60  
 TCGAATnCGT CGAATCGATG CTATCGATCG AATGCTATCT GAGTCGAATC ACGTCGATCT 120  
 G 121

15 (2) INFORMATION FOR SEQ ID NO: 1796:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 62 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1796:

25 AATTCATGTT AAAATCCTCC TGATATTAGA TGGCCCATTT TTATTTTTTT CGTTTCCATA 60  
 TA 62

30 (2) INFORMATION FOR SEQ ID NO: 1797:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 397 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1797:

40 CATACTCGAC AATTTAGATG GTGAaTACTT ATCATTTAAG TCCTTTGaCA CCTCATCTAA 60  
 AATTCTAGGA CTTTAAACAA TTTCTTTATA CGTATTTACA AGTTGAATAT TACTTTGAAC 120  
 CTCTTGCGCC ATAAACTGAG GATTGTCACC CTTAGTTTGA TTCACTAAAA TTTGAGTATT 180  
 45 AGCTTGATAT TTAGGTGATA AGACGAAAAA TGTAACAATA GCGCTAATAA TTA AAAAATAA 240  
 TAGCGGTAAA ATAATTAAAA TCTTCAAGTT TTTTGTAAAT ACTTCTTTAA TTTTGTAA 300  
 TTCTAATGTA CTTTCCATTA TTTACCTCCC TAAAAATTT TCATTAAAAT TGGTATTATA 360  
 50 TATATAGTAT TTACATATTA CATATCGTTT AAACAAT 397

(2) INFORMATION FOR SEQ ID NO: 1798:

55

(A) LENGTH: 66 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1798:

10 CGGGTAACAG CGAATGGTGT GTCACCGTAT ATAACCTTAC TATTTAATAT TTGGCCTGTT 60  
 GCTTTC 66

(2) INFORMATION FOR SEQ ID NO: 1799:

15

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 77 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1799:

25 GTTGCTAAGT TTGTATTACA ATTTAAATGA TTTTtagCTT GAGTAAGTTT ATTTAAAGAT 60  
 GCAGTAATTT CGCTAGG 77

(2) INFORMATION FOR SEQ ID NO: 1800:

30

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 172 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1800:

40 TAATGCTATT TAATTTTCTA CTTCTAAGC TTCCACCCAT AACGAGTAAn ACTTTTTTAT 60  
 TTTcATTAAA GCCTGTTAAT TGATAACCAT TATGTGCATT ACCATTTTTT AAATCTTCTC 120  
 GAATTGTTGC TCCAATAAAA TCAGCTTTCT CTTTAGGTAA GTAGTTTAGC GT 172

45

(2) INFORMATION FOR SEQ ID NO: 1801:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 140 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1801:

55

AGTAAAATTT GTCATCACGA TCAGCAAAAG CTTTGTGATTC TGACGTATCT TCCATAAATG 120  
ATCTAAAAAT TGGTAGTTCG 140

(2) INFORMATION FOR SEQ ID NO: 1802:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 60 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1802:

ATCCCCCGTA CAGACTTCAG CTTACGTAAA CATGCTGAAC ACTCTAGTGA AGATTTCAAA 60

(2) INFORMATION FOR SEQ ID NO: 1803:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 60 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1803:

CAATTAAAT GCATCTTTCC CATTAAATTC ATTTGTTGTC GCTTTAGCTG TGTTAATTAA 60

(2) INFORMATION FOR SEQ ID NO: 1804:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1804:

ACTTGATCGA AAAGGTTTCA TACCGGTAAA CGATAAAGTT GAAACAAATG 50

(2) INFORMATION FOR SEQ ID NO: 1805:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 53 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1805:

## (2) INFORMATION FOR SEQ ID NO: 1806:

- 5 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 70 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

10

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1806:

15 AAGAACTGTC TATGAATATT GGATGACGCT TTGATGAGAA CATTAGTAAG CCATTTGTTT 60  
 AAGGAGTACA 70

## (2) INFORMATION FOR SEQ ID NO: 1807:

- 20 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 77 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

25

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1807:

30 TAGCATTCTT AATGGAATCC AATCTTACCG AATGACAATT GGAATATAAC TGGTGATAAT 60  
 GTTGAATGGT CCTGTGA 77

## (2) INFORMATION FOR SEQ ID NO: 1808:

- 35 (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 121 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

40

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1808:

45 CCCGGCCCCAA AACCCCTTTT TTGGGTAAAA AATTTTTTTT AAAAAGGGAA AAATTTCCCC 60  
 TTTTTTGGTT CCCAAATTTT AAATTAGAAA GGGCCCCCCC TTCCCCCCCCA AATnTTTCCC 120  
 A 121

## (2) INFORMATION FOR SEQ ID NO: 1809:

50

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 60 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 55 (D) TOPOLOGY: linear



(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1809:  
5 AAGTTTGGTG AAGGAACCAC GTGCATGATG GTGTTCAAAC AATGCGTTAC GATGTTGACG 60

(2) INFORMATION FOR SEQ ID NO: 1810:

(i) SEQUENCE CHARACTERISTICS:  
10 (A) LENGTH: 58 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1810:  
TGGTTGAGAA AACACAGCGT TAAAGTTGAG GTATTTCAAA AGACAAGTTG GAACATTA 58

(2) INFORMATION FOR SEQ ID NO: 1811:

20 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 55 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1811:  
30 CTTAAATAGC AAGTGGTTTT ATAACAAC TT TGAGTTATCT CAATATAGTT ATCGC 55

(2) INFORMATION FOR SEQ ID NO: 1812:

35 (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1812:  
TAAGTCTTCA ATTTTTCAG TTGATACACC TAAGTGATAC AGCCATTCTT 50

45 (2) INFORMATION FOR SEQ ID NO: 1813:

(i) SEQUENCE CHARACTERISTICS:  
50 (A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1813:

## (2) INFORMATION FOR SEQ ID NO: 1814:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1002 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1814:

```

TGTCATGCG GGAAATACTA GGACATGAAA ATTATGCTAA AGGCATCAAA GTAAGTAAAA    60
ATAATGGCGT AGTGGATATA GATATGTACA TTATTGTAAG TTACGGTGTG AAAATATCTG    120
AAGTTGCCAA TAATGTACAA TCAACAGTGA AATATACTTT GGAAAAATCA CTTAATGTAT    180
CAGTAAATTC AATCAATATA TATGTACAAG GTGTACGTGT GAATAATACA GGCAAGAAAG    240
CTTAGGAGGA CAACTTGAAA TGATTAGCAA AATTAATGGT AAATTATTTG CCGATATGAT    300
TATACAAGGG GCACAAAATT TATCTAACAA TGCAGATTTG GTAGATTCTT TGaATGtGtA    360
TCCAGTGCCA GATGGtGATA CAGGAACAAA TATGAATCTT ACTATGACTT CAGGTCGCGA    420
AGAAGTAGAG AATAATTTGT CGAAAAATAT CGGCGAATTA GGTAAAACAT TCTCGAAAGG    480
TTTACTAATG GGTGCAAGAG GTAACnCTGG TGTCATCTTG nCACAAATTAT TCAGAGGATT    540
TTGTAAAAAT ATTGAAAGTG AATCTGAAAT TAATTCAAAA TTGTTAGCTG AAAGTTTnCA    600
AGCTGGTGTT GAAACGGCAT ATAAAGCTGT TATGAAACCA GTTGAAGGTA CAATACTTAC    660
AGTTGCAAAA GATGCTGCGC AAGCTGCAAT AGAAAAAGCA AATAATACTG AAGATTGTAT    720
AGAATTAATG GAGTACATTA TTGTAAAAGC CAATGAATCA CTTGAAAAACA CACCAAACCT    780
ATTAGCTGTA CTAAAGAAG TTGGTGTTGT TGATAGTGGC GGTAAAGGTT TGTATGCGT    840
TTACGAAGGA TTCTTAnAAG CGCTTAAAGG TGAnAAAAGTT GAAGCCAAAG TTGCAAAGAT    900
AGATAAAGAT GAATTTGTAC ATGATGAACA TGATTTCCAT GGTGTAATTA ATACTGAAGA    960
TATTAATTTA TGGCTATnGT ACTGAGATGA TGGTTCGTTT TG                                1002

```

## (2) INFORMATION FOR SEQ ID NO: 1815:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1815:

5 GACAACGCTA TTATTTT TAG TTTTCAATT CTATTATGTC ATAATTATGT CACTCAAAAA 120  
 CTGTTTCCA ACATTGATTT ATTGTTGGAA AATCTCGAAA ATCTAGTCTA TTTCTCCAAC 180  
 AATCGAAGAr TTATGCCCTT TTTTCTCCCT TTaAATAAGT CATAATACGA GGCATACATG 240  
 CAACATTTAC AATAAAATAT GTTCCTACAT CGTATTATAC GAATGCTCAC ACTTATAGTT 300  
 10 GTTTAGTAAA CCCAGATGTA TTGCTAACAT ACCCATnAnC nCTATATAGT T 351

(2) INFORMATION FOR SEQ ID NO: 1816:

(i) SEQUENCE CHARACTERISTICS:  
 15 (A) LENGTH: 62 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1816:

ATATCGTATC CCATGCGGGA AGGGCTTTAT TTATACTGTG CACGATGAAT GCGCACAACG 60  
 25 GG 62

(2) INFORMATION FOR SEQ ID NO: 1817:

(i) SEQUENCE CHARACTERISTICS:  
 30 (A) LENGTH: 70 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1817:

AAAGGGGGGA AATTTTTTTT TTTTGGGTTT GGGGGGAAAA TTTTTTTTGG GTTTGGGAAA 60  
 40 TTAAATTAA 70

(2) INFORMATION FOR SEQ ID NO: 1818:

(i) SEQUENCE CHARACTERISTICS:  
 45 (A) LENGTH: 51 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1818:

CAAGTTCGGA ATGCGAACGC GTCTTAATCT ATATACAAGT GATGCACTCC A 51

55 (2) INFORMATION FOR SEQ ID NO: 1819:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1819:

10 TCGCCATACT ATCGACAGCT GCTAAAATTG CGCTCTTCTT GTGTCGCAAT CG

52

(2) INFORMATION FOR SEQ ID NO: 1820:

(i) SEQUENCE CHARACTERISTICS:

15

- (A) LENGTH: 58 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1820:

CAAATGGGG AAATTACTAG AAATGAAGAT ATTTATAAAG ATGACTGGAC GTCAACTT

58

25 (2) INFORMATION FOR SEQ ID NO: 1821:

(i) SEQUENCE CHARACTERISTICS:

30

- (A) LENGTH: 58 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1821:

ACTGCTTCAG CACCTGTATT CATTGGGGAA AGCTTTATCG TTGACCGGCC AGTTTACA

58

(2) INFORMATION FOR SEQ ID NO: 1822:

(i) SEQUENCE CHARACTERISTICS:

40

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1822:

ACCTGTTGCT CGTGTCATAA ATAGGTGACT ATAAATCTCT GTTCAATATA CTTTTCGTTT

60

50

TTCCAATCTT AAAGGTCGAT GTTCGTGAGT AATCTTATCT CTGGnCCAAT TTTAATGTCA

120

TGATATGTTT ATAGTATCAC CCCTTTGTTG TGTAATAATA ATCAGGTGGG TGGTTAGAAC

180

55

GGTGTGAATA

190

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1823:  
AGCnTTAGCn TATGGTTTAG ACACAAGTGN TAAAGATGCn AAGTTCTTGT 50

(2) INFORMATION FOR SEQ ID NO: 1824:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 102 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1824:  
AAAAATTGGA AAAAAGGGGC CCAAAGGTTA ACCCAAATTG GAAAnAAACC CAAATTTTTT 60  
GGAAATTAAC CCAAAAATTG GCCCCAATT GGAACCCAAA AT 102

(2) INFORMATION FOR SEQ ID NO: 1825:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 57 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1825:  
ACGTACCAAT GTCATAATCA GTCATTTTAC CACTCTTAAT AATCTGCTTC CGGGCAA 57

(2) INFORMATION FOR SEQ ID NO: 1826:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 61 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1826:  
ACCATCTTGT ACAAAGTGGA TGTCATATGC ACCATCTTGT GTTTTGAGCT GCATTTAATT 60  
G 61

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 56 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1827:

ACCGTTTTCGC CAAGCCGACC TAATTTCTCA GCAATATTTC TTTCTACGCC ACCAAT 56

(2) INFORMATION FOR SEQ ID NO: 1828:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 62 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1828:

ACTTATAGGG CGCACTTATT TTTCGCTTCC ATAGCGAAAC TAGTGTCAC TATACGTATG 60  
TG 62

(2) INFORMATION FOR SEQ ID NO: 1829:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 54 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1829:

GCTACACACG ATTTACCTTT CTTGTCACGT TTTGCGACCA TCATTGTGAT GATA 54

(2) INFORMATION FOR SEQ ID NO: 1830:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 67 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1830:

GTAATGACCA TCGCTGATTT ATGACATTGT TAGATCTCAT GTGCCATTTA GTCTGCTGAA 60  
TCTTGGG 67

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1831:  
ATAACTCTTC GnCAAACTCC TCAACAAACT TCTGTGTTC CATCTTCTGG 50

(2) INFORMATION FOR SEQ ID NO: 1832:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 101 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1832:  
AAACGTnAGA ATATTTAATG GAGCCAAGAA TGGTTTACAG ACGGAGAAAT GGGATATGTT 60  
GAAGCGAGGC GTACGCGGAA AGCGTACTAG GCTAGAACAC T 101

(2) INFORMATION FOR SEQ ID NO: 1833:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1833:  
TCGTCATCAT GTCTGTGTTA CCAACGTTTG ACGATTTAnT TCATGCnGAA 50

(2) INFORMATION FOR SEQ ID NO: 1834:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 55 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1834:  
ATAAGTTAAT TGATTTATTG ATAAAGAGAA GCCAGATTTA AATATTATTA AACGT 55

(2) INFORMATION FOR SEQ ID NO: 1835:

(A) LENGTH: 58 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1835:

10 AAACAAGAAC CCCCATATGG TTAAGCTGCG CGTTTCAACA TACGGGGGGT TTTCATAT 58

(2) INFORMATION FOR SEQ ID NO: 1836:

(i) SEQUENCE CHARACTERISTICS:

15

(A) LENGTH: 125 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1836:

TACGTTTTAT AAAACAAGA ACTAAAGTAT GCAGTGTGAA TTGTTCACTT TcTGGCGTT 60

25 GGAATTGATT AAAACGAGAT ATGGTGTGTG GGAAGTTGTT TGTGTTTGCA TATTTTAAAC 120

CGATT 125

(2) INFORMATION FOR SEQ ID NO: 1837:

30

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 118 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1837:

40 AATCTACAAT CCTGAATCAC TCGTTAAGAT TAAAAGTATC GACAATGAGT ATCTGAACAT 60

GAGCTCATCT GCCGTTTTTA ATGcNAAAAA CCGGCGGCGG GATATTTTTG ACCACGGC 118

(2) INFORMATION FOR SEQ ID NO: 1838:

45

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 141 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1838:

55 ATTTGGGGTT TTGGGACCCT TACCCAAAAA TTGGGGTTTG GTTATTAAAA AAAAGCCATT 60



GTCCCAGTTT TTGGGATTGC C

141

(2) INFORMATION FOR SEQ ID NO: 1839:

5

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 54 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1839:

15

TCTGGGGACT AAGTATGTCT CAGGCTTTAT GCTGTTATGT TTGAAAATGA AAGG

54

(2) INFORMATION FOR SEQ ID NO: 1840:

20

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 133 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1840:

ATTAAAAAAC CTTTAAAC CGGAACCCA AGGAAAAATT CCGGGTTTAA ATTAAACCT

60

30

TTGTAAATT GGTCCAAAC CAACCTTTTG GGTAAATTTT AACCAAGGAAT TTTGGAAAAC

120

nGTTTTATTT GGA

133

(2) INFORMATION FOR SEQ ID NO: 1841:

35

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 50 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1841:

AAAGTATGGA TTGATCGTGG AGAAGTTCTT CCTACTAAGA AACTAGTCG

50

45

(2) INFORMATION FOR SEQ ID NO: 1842:

50

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 60 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

55

GCGTTTTCCT GGGATATGTT TGATGAATGG ATGTTGTAAC ATGTTAATAA ATCGTTGGTA 60

(2) INFORMATION FOR SEQ ID NO: 1843:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 60 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1843:

CTGAGATGAA TATTGTGTTT CGCCATACAT ACTGGGTAAT ATCCCAACCA TTGCTGTAAA 60

(2) INFORMATION FOR SEQ ID NO: 1844:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 125 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1844:

CATTACCTGT AAAAGGAAGC TAAAGACGAT GAGTATTTAT AGAAACCAAT TGCCGACCAT 60

TTGCAGCCAT TAGGAGGGTA GGAGGGCAAT CGCGnCCAAA GGTTATTAAAC CGTCAATTAC 120

CTTGA 125

(2) INFORMATION FOR SEQ ID NO: 1845:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 126 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1845:

ATCCACCTGG GTTTGTTCTT AATTAACTT GnTAATTAAT TGGGTTGGGT CCGGCAAAAG 60

TCCGGACCTG CAAATCGGAT TTTATCGTTA AATCTTGAAT TCTATTGCCC ATATTAAATC 120

GCAAAT 126

(2) INFORMATION FOR SEQ ID NO: 1846:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 57 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1846:

5 TTTTGGGAAT AAACCAATTA ATCATGGGCA AAAAATAAGC AATCCAAGTA CTTACTA 57

(2) INFORMATION FOR SEQ ID NO: 1847:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 50 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1847:

TGATAAATAT TTCATCTAAA GAGAGGGAGT CATTATGACA CTACTTACTG 50

(2) INFORMATION FOR SEQ ID NO: 1848:

(i) SEQUENCE CHARACTERISTICS:

- 20 (A) LENGTH: 65 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
25 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1848:

30 ATCTAGGCAA TGAATGGACG GACTTAATAT TGATGTGCAA CAAGAAGAGG AGAAGCGAAT 60

CAATA 65

(2) INFORMATION FOR SEQ ID NO: 1849:

35 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 244 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1849:

45 CGTGTGAAGT CATTACTTTT AATCCCATGA TGATGGTGAT GGATGAGACG ATATCTCTCT 60

GTCTTTAACA GTTAAGTCCA ATTCTTCCAA CGAAACTTTT CCATAGGTTG TTTTATAAGT 120

TGGAATACTT GCACAAATCA TAcCTAATTG CTTATCAATT TTCTCAAGAC TGTCAATCAGT 180

50 TATAAGATCA ATTTTATTAA TAATAATCAT GTCACCTAGT TTCAACTGAT CTTCCATCAG 240

GCGA 244

(i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 106 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1850:

TTTAAAGGTT CCCGGAAGG TTTGAAACCA AACCTTTGCC CCGGCCCCC GGGAAAAAA 60  
AAAnTTGGTT TAACCCCGG GGGGGGGGC CCTTAAAAA ACCCAA 106

(2) INFORMATION FOR SEQ ID NO: 1851:

(i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 84 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1851:

TTTTTAAGG CCCTTGGGG GCCAATTTTC CCCCCCCCC AACCTTCAA AGGTTGGGG 60  
GCCTTTTTTT TTAAATTGGG GGGA 84

(2) INFORMATION FOR SEQ ID NO: 1852:

(i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 52 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1852:

TCATGATTAA AATTCAACAA TTACAACATC ACTTTGGATC ACATAAGAGT AA 52

(2) INFORMATION FOR SEQ ID NO: 1853:

(i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 56 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: double  
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1853:

ATAAACATT TCAAGATGCG CTTGTAATTG TATGTGATAC TGCCAATGCT CCACGA 56

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1854:  
 AAAAGATCAT GCGCATAATG ACATGGTGAT GATATGAGTA TGATGGTGGG TACA 54

(2) INFORMATION FOR SEQ ID NO: 1855:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 52 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1855:  
 ACAACAAATG GTAATGCATA AACATACAGC CAATAGCTAC AATTGCACGA CG 52

(2) INFORMATION FOR SEQ ID NO: 1856:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 57 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1856:  
 ACGGCTGCAC TCATCATGGT CTGTGGCGTG ATTGTTAATG TTTTAGTTGC CCGCTTC 57

(2) INFORMATION FOR SEQ ID NO: 1857:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 192 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1857:  
 GCAGATAACT TCCTTGATCC TAACAAAGCA AGTTCTCTAT TATCTTCAGG GTTTTCACCA 60  
 GACTTCGCTA CAGTTATTAC TATGGATAGA AAAGCATCCA AACACAAAC AAATATAGAT 120  
 GTAATAAACG AACGAGTTCG TGATGACTAC CAATTGCACT GGACTTCAAC AAATTGGAAA 180

## (2) INFORMATION FOR SEQ ID NO: 1858:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 77 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1858:

CGCTGCACTT CCTGAACGCA GTGAGACCAG AACGTGGTGT CACTTTCGGT CTATTCCGGT 60  
TAAGTGTGG TCTCGGA 77

## (2) INFORMATION FOR SEQ ID NO: 1859:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 53 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1859:

TTTGCGTTC GTGATTTTCT CTAGACGTAG TAACTTCCCT ACTCTTGCG TCC 53

## (2) INFORMATION FOR SEQ ID NO: 1860:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 59 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1860:

TTTCTCACTC GCGCATTTCA GTTTGTTTGT ATTTACCCGT CTCTTCTATT TGTCTTAAT 59

## (2) INFORMATION FOR SEQ ID NO: 1861:

- (i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 69 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1861:

AATGAATGTA TGCACATTAA CATCATCAAT TAATCCTTTT AATAAATTGA GTTGTAATTT 60

## (2) INFORMATION FOR SEQ ID NO: 1862:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 54 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1862:

ATTAATACTG AGCAAATGTG CATAAGACAT CATGAATTAG CACCAATTTA CAGG 54

## (2) INFORMATION FOR SEQ ID NO: 1863:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 89 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1863:

TTTAACCATC ATTCTATGTC AAAGTTTTGA AATGATGGTT ATTTTTTATT GCTTAAATTT 60

ATTATTGCTA CTACTATACC AATGAAAGT 89

## (2) INFORMATION FOR SEQ ID NO: 1864:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 400 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1864:

AAAGCTGGTA CGCCTGCAGG TACCGGtCCG GAATTCCCGG GTCGACCCAC GCGTCCGGAA 60

CCAAAATTGC ATCTGATGGT CTCAAGGGTC GTGTGTTTGA AGTGAGTCTT GCTGATTGTC 120

AGAATGATGA AGTTGCATTT AGAAAATTCA AGCTGATTAC TGAAGATGTT CAGGGTAAAA 180

ACTGCCTGTA CTAACCTCCA TGGCATGGAT CTTACCCGTG ACAAATGTG TTCCATGGTC 240

AAAAAATGGC AGACAATGAT TGAAGCTCAC GTTGATGTCA AGACTACCGA TGGTTACTTG 300

CTTCGTCTGT TCTGTGTTGG TTTTACTGAA AAAACGGCAA CAATCCAGAT ACGGGAnGAC 360

CTCTTnTGCT GCAGCACCAA CAGGTnCCGC CAAATCCGGA 400

## (2) INFORMATION FOR SEQ ID NO: 1865: